

CLIMATOLOGICAL DATA FOR MARCH, 1913.

DISTRICT NO. 2, SOUTH ATLANTIC AND EAST GULF STATES.

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GENERAL SUMMARY.

The tremendous energy displayed by the elements in storms and floods during March, 1913, has probably never before been equaled in the United States. In the destruction of property and loss of life the South Atlantic and East Gulf States shared, but fortunately not on so great a scale as the States in the Central Valley. Throughout the district the month was characterized by the excessive number of severe local storms and tornadoes and by heavy rains that caused more or less dangerous floods in almost every important river from Virginia to Mississippi, but there was generally ample time for the issue of flood warnings, which were undoubtedly instrumental in saving much property.

The month was quite warm in Virginia, the Carolinas, and Florida, and moderately cool in the Gulf States. The precipitation, however, was generally in excess throughout the entire district. In South Carolina, Georgia, and Alabama the average precipitation exceeded that for any previous March on record. Aside from the damage caused by floods, the heavy rains kept country roads almost impassable for long periods and greatly hindered plowing and other farm work. The heavy frosts about March 28 were destructive to the fruit crop, especially in Georgia.

The fluctuations of barometric pressure during March were very pronounced. The most noteworthy of the storms that caused excessive rains and dangerous gales in the district were the following: On the 13th an atmospheric depression that had moved from Denver, Colo., was central at Dodge City, Kans., with the pressure below 29.45 inches; on the following morning this disturbance was central over Charles City, Iowa, with the remarkably low pressure for a land storm of 28.86 inches. The lowest barometric pressures in the district were generally registered on the 13th to 15th, and on these dates the heaviest precipitation and the most destructive storms occurred in the Gulf States. High pressure followed rapidly with a maximum of 30.91 inches on the 18th at Norfolk, Va. Another marked barometric depression was central on the 21st between Chicago and Toledo with the pressure 29.25 inches, and a third was noted on the 27th between Washington and Buffalo with a pressure of 29.50 inches, both accompanied by local storms and high winds in the South. The lowest atmospheric pressure for the district was 29.49 inches at Richmond, Va., on March 27.

TEMPERATURES.

In all the States of the district touching the Atlantic Ocean the temperature for March was considerably above normal, the excess reaching over 6° in eastern North Carolina and Virginia and diminishing toward the west.

Over western Georgia, Alabama, and Mississippi the temperature was moderately below normal, the greatest deficiency somewhat exceeding 2° in the western part of the Mississippi area. The mean temperature for the entire district was 57.2° and the departure +1.1°. The month averaged 3.5° warmer than March, 1912.

The first decade was cool with the minimum temperatures for the month at a large number of stations on the 1st in Florida and on the 3d or 7th in other portions of the district. The minimum temperatures on these dates ranged from 10° at Hot Springs, Va., to 32° at five places in Florida. Vegetation, however, had not yet advanced sufficiently to be seriously damaged by freezing weather at this period. A moderate degree of cold was also experienced on the 16th to 19th, and again on the 27th to 29th.

There were two periods when the temperatures were decidedly above normal, namely, from the 10th to 15th and 20th to 26th, the maximum temperatures for the month generally being registered on the last date. A pronounced temperature change occurred during the night of the 26th. At many stations, especially in the northern portion of the Gulf States, the highest temperatures on the afternoon of March 26 ranged near or slightly above 80° and dropped to freezing or below before the close of the 27th. The fall in temperature continued to the 28th. Owing to the warm weather of the 20th to 26th fruit trees, especially peaches and plums, were in full bloom, and the subsequent killing frosts on the 27th to 29th caused a great amount of damage to fruit, especially in the Gulf States.

The highest monthly mean temperature for March was 77.4° at Key West, Fla., Miami following with 75.4°, and the lowest was 44.8° at Hot Springs, Va. The highest temperature for the district was 91° on the 23d at Tarpon Springs, Fla., and the lowest 10° on the 7th at Hot Springs, Va.

PRECIPITATION.

An immense volume of water fell during the month over the southern portions of the district, the total amounts ranging from 10 to over 19 inches at 48 stations in central-southwestern Georgia, western Florida, and southeastern Alabama, or from 6 to 13 inches above the normal. At Highland Home, Ala., the amount was 19.48 inches or 13.81 inches above the 21-year normal; at Bermuda the excess was 13.25 inches; at Evergreen, Ala., 12 inches. At 12 other scattered stations in the district the totals for the month exceeded 10 inches. In South Carolina, Georgia, and Alabama the State averages for March, 1913, were the greatest on record for March, and at numerous stations the total for the month was the greatest on record for any month of the year. In Georgia during the past 22 years only two months gave

a greater average rainfall, namely, August, 1898, and August, 1907, when the State averages were, respectively, 10.09 and 9.92 inches as compared with 8.99 for the current March. The precipitation was much above normal in practically all portions of the district, except along the immediate coast line from Hatteras to Norfolk and along the coast of Florida opposite to Key West. The State average for South Carolina was 7.40 inches, excess 3.55 inches; for Georgia 8.99 inches, excess 4 inches; and for Alabama 10.35 inches, indicating an excess of 4.64 inches. The mean for the entire district was 7.24 inches and the departure from the normal +2.63 inches.

Light showers occurred on the 1st and 2d, and about the 4th to 5th, but as a rule the rainfall during the first decade was small. The heaviest rains fell during the following periods: 10th to 11th, 13th to 16th, 19th to 22d, 24th to 27th, and 30th to 31st. In the Gulf States the periods of fair weather were briefer than in the northern part of the district. The heaviest local downpours occurred on the 9th and 10th, 13th to 15th, and on the 27th, when excessive 24-hourly rains fell at a very large number of stations. The maximum amounts in 24 hours in each State in the district were as follows: Virginia, 2.80 inches at Rocky Mount on the 14th; North Carolina, 4.33 inches at Chimney Rock on the 14th; South Carolina, 3.60 inches at Broxton on the 16th; Georgia, 5.50 inches at Woodbury on the 14th-15th; Florida, 8.52 inches at Pensacola on the 9th and 10th; Alabama, 8.25 inches at Highland Home on the 14th-15th; and in Mississippi, 6.27 inches at Biloxi on the 9th-10th.

The excessive precipitation during the period from the 13th to 16th caused destructive floods which are described below. At some river stations higher stages occurred than were ever before experienced, and in a few cities the heavy local rains flooded streets and low districts, doing considerable damage to property. In certain districts farm lands were badly washed, country roads ruined, bridges washed away, farm labor was brought to a standstill, and railroad traffic interrupted by washouts.

The greatest amount of precipitation for the month was 19.48 inches at Highland Home, Ala., and the least was 0.34 inch at Key West, Fla. Norfolk, Va., and three stations in southern Florida received less than 2 inches. The amount of snowfall during March was insignificant, only traces having been received at one or two places in each State in the district, except Florida.

MISCELLANEOUS PHENOMENA.

March was characterized by very high winds, the average hourly velocity exceeding 10 miles at some interior stations, where such a high wind movement is rare. Gales exceeding 40 miles an hour occurred in all States from Florida to Virginia, with the maximum, 58 miles from the southwest at Norfolk, Va., on the 27th. On the same day Richmond, Va., recorded 54 miles south; Hatteras, N. C., 52 miles south; and Atlanta, Ga., 48 miles southwest. Gales also occurred locally on the 4th, 10th, 15th, 21st, and 24th. The total wind movement at Pensacola, Fla., for March, 11,548 miles, was the greatest monthly movement ever registered; but the maximum velocity at that station was only 54 miles from the south on the 21st. The prevailing direction of the wind was southwest or west in Virginia, the Carolinas, and Georgia, northeast in Florida, north in Alabama, and south in Mississippi.

The average number of clear days for the district was 12, partly cloudy days 9, cloudy days 10 and days with precipitation 11. The average number of hours of sunshine was 202 (mean for 20 stations) and the percentage of possible 55. The greatest percentage of sunshine was registered at Miami, Fla. (67 per cent), and the least at Hatteras, N. C., and Atlanta, Ga. (44 per cent).

SEVERE LOCAL STORMS.

Georgia.—During the progress of the great northern disturbance of March 11-16, 1913, from Kansas to Iowa, where the remarkably low atmospheric pressure of 28.86 inches was reached at Charles City, Iowa, on the morning of March 14, a number of unusually severe local storms occurred in western and northwestern Georgia, several of which unquestionably presented all the characteristics of true tornadoes. At 7 p. m. central time on the evening of March 13 the atmospheric pressure at Atlanta, reduced to sea level, was 29.88 inches, the temperature was 67°, with brisk southwest winds and light rain. On the morning of March 14 the pressure had fallen to 29.82 inches, the temperature was 61°, wind high from the southeast, and the rainfall for the preceding 24 hours was 1.42 inches. In themselves these conditions were not important, but as Georgia then lay in the southeast quadrant of the main depression over Iowa, they seem to have been favorable for the formation of local whirls or tornadoes which caused considerable loss of life and great damage to property. With the exception of the Columbus tornado, most of the storms fortunately passed through sparsely settled country districts.

Three centers of most active storm development appeared, one at Columbus, another just east of Atlanta, and the third northeast of Rome.

The Columbus tornado originated on the Alabama side of the Chattahoochee River at about 3.30 o'clock on the early morning of Friday, March 14, and after wrecking a number of houses in Girard, Ala., it crossed the river and passed through the central portion of the city of Columbus from west to east. The path of the storm did not exceed about a block in width at any point, narrowing occasionally to hardly more than 100 feet. After partly wrecking the plant of the Eagle and Phenix Mills No. 3 and doing a great deal of damage to the Muscogee Cotton Mills, the storm unroofed and otherwise damaged stores on both sides of Broad Street, the main thoroughfare, then crossed the residence district and left the city at the eastern border. Many fine trees were uprooted, residences were damaged, and the electric light and power service was put out of commission. The damage was estimated at over \$100,000.

The storm near Atlanta, which may be termed the Clarkson-Tucker tornado, originated just east of the Soldiers' Home in Fulton County, moved northeastward through Dekalb County into Gwinnett on the evening of March 13, attended by great damage to farm property in its path. It cut a clean path through the forests, demolished country residences, and destroyed farm property of every kind. The funnel-shaped cloud was described by a negro eyewitness as a "great horn," a very apt designation of the twisting funnel. The total length of path was about 25 miles. The greatest amount of damage was done between Clarkson and Tucker, where eight people were killed and many injured.

The most northern of the local storms reported occurred at about 9 p. m. March 13, northeast of Rome, Floyd County, traveled in a northeasterly direction from

Armuchee through Curryville nearly to Resaca, passing just west of Calhoun, Ga. Fifteen persons were killed and many others injured. The length of the path was about 20 miles, and the damage to farm property was very great. The condition of those injured was rendered more appalling by the floods in the streams, which prevented the arrival of timely aid. During the height of the storm earthquake shocks were reported to have been felt at Calhoun, Dalton, and a few other points in the vicinity.

Similar storms of less intensity occurred again on the 21st and on the 27th. The greatest amount of damage was done by local disturbances near Madison, Morgan County, Louisville, Jefferson County, at Buchanan, Haralson County, near Waycross, Ware County, and at several other widely separated places.

Alabama.—Report on severe local storms near Anniston, Ala., on March 13, 1913, by R. M. Williamson, observer Weather Bureau, Anniston, Ala.:

Of the numerous destructive storms occurring in the Southern States during the afternoon and evening of March 13, 1913, two passed along the Coosa River Valley in Talladega and Calhoun Counties, Ala., at the same time in the afternoon, each of which, according to the reports of eyewitnesses, possessed characteristics of a tornado. Both storms moved in a northeasterly direction and traversed considerable territory. The less severe of the two passed within 1 mile of Childersburg, Talladega County, at about 3.30 p. m., cutting a path 400 yards wide and about 10 miles long, and destroying property to the extent approximately of \$4,000. The storm possessed rotary motion, as made evident both by the movement of the black funnel-shaped cloud and the distribution of the debris in its path. It was attended by much lightning and a roaring noise, but no precipitation.

The other storm mentioned appeared in the vicinity of Duke, Calhoun County, about 3.25 p. m., and destroyed practically everything in its path, which ranged from 100 to nearly 500 yards in width. This storm also possessed many of the characteristics of a well-defined tornado, the black funnel-shaped cloud, heavy thunder, and a rumbling noise. Many trees were twisted off, and those that were blown flat lay in different directions, varying from northeast to northwest. At Duke the storm destroyed stores, churches, school buildings, dwelling houses, many barns, and other property, and one man was killed and several seriously injured. After leaving Duke the storm continued its northeasterly course, increasing in intensity and devastating the country along a path from one-quarter to half a mile wide and 12 to 15 miles long. Some lives were lost and much property destroyed at Mount Gideon, 8 miles beyond Duke, and at Calvins Gap, 2 miles farther.

Talladega, Ala.—Report of destructive storms which visited Talladega County on the night of March 20–21, 1913, by William E. Henkel, cooperative observer:

Two severe storms occurred in the county Friday morning, March 21, one half an hour after the other, moving in a general direction from southwest to northeast over paths about 100 to 200 yards wide, one storm being about half a mile south of the other. There was a constant electric display and a roaring noise, but few people were injured. The property damage was perhaps \$25,000 in Talladega County, not counting timber destroyed. An unusual freak is worth recording: At the Ben Groce place, 8 miles east of Talladega, after unroofing the one-story manor, the plastered ceiling was lifted bodily 50 feet, driven as many yards east, and the laths stripped and lodged in a bundle in the forks of an oak tree 40 feet from the ground as uniformly as if placed there by hand. The number of laths was at least 100 and the ends were as even as in the usual bundle. Some houses were so completely demolished that not a vestige of house or furniture could be located after the storm.

Birmingham, Ala.—Reported by E. C. Horton, local forecaster, Weather Bureau, Birmingham, Ala.:

A severe thunderstorm occurred at Birmingham on the night of March 20, 1913. The wind which had been light from the south and south-east, steadily increased in velocity, becoming brisk about 10 p. m. The velocity ranged from 25 to 30 miles an hour until 3.04 a. m. on the 21st, when for a period of about 5 minutes the velocity increased to 40 miles an hour (extreme velocity 50 miles an hour) from the west.

Much damage was done by the wind in various sections of the city. Two churches were demolished, and several other buildings of light construction were blown down or thrown from their foundations. Many pine trees were uprooted or had their tops twisted off. The greatest loss occurred at the Elmwood Nurseries, where the greenhouse was badly damaged and many choice flowers ruined. The storm traveled from southwest to northeast, following the direction of the valley, and there was no evidence of rotary winds.

Similar storms of great violence were experienced at many places in Alabama to which only brief reference can be made. On March 13, storms occurred near Tuskegee, Milstead, Maple Grove, and Lincoln, Ala. Aggregate damage at least \$10,000. On March 14 a severe storm occurred in Bullock County, on the 21st a destructive storm occurred at Lower Peach Tree, Wilcox County, and at Heflin, Clebourne County, aggregate damage about \$40,000.

Mississippi.—Report by W. E. Barron, section director.

Three storms of marked severity occurred in northeastern Mississippi during March, 1913.

The first was a tornado that started near the southwest corner of Pontotoc County about 1 p. m. March 13, and traveled northeasterly into Tishomingo County in nearly a direct line, reaching that point about 2.30 p. m. In its course it passed over Algoma, Belden, Guntown, near Marietta, and Tishomingo. At each of these places considerable loss of property resulted and a number of people were killed and injured. The roar of the storm was louder than that of an approaching railroad train. A second storm occurred about 12.30 a. m. March 21 over the northern portion of Prentiss and a part of Alcorn County, in a path from southwest to northeast, about three-fourths of a mile wide. It was accompanied by heavy thunder, continuous and blinding flashes of lightning, while the dense black clouds seemed very near the earth and to roll along like the waves of the ocean. The debris was carried forward in a straight line. The greatest destruction occurred at Rienza, Alcorn County, where two people were killed.

The third storm began in Winston County, near Louisville about 1 a. m. March 21, and passed to the eastern line of Noxubee County by 1.30 a. m. Mr. B. T. Webster, cooperative observer at Louisville, gives the following description of this storm:

The storm passed through the town of Louisville in a due easterly direction about 500 feet north of the main business part of the town, and continued in an easterly direction for a distance of 7 or 8 miles in which distance it bore to the north about half a mile. The path was not over 300 feet wide at the point of greatest destruction. There was a dark funnel-shaped cloud, accompanied by lightning and rain, and a noise like that of a heavy train of cars though of short duration. Two churches and from 20 to 30 houses were destroyed and two people were killed. The property loss is estimated at \$25,000. The last damage done was the destruction of a church near the Alabama line.

Tupelo, Miss.—Wm. S. Vincent, foreman of the Government fish hatchery at Tupelo and also cooperative observer, furnishes the following description of a severe hailstorm that occurred in Lee County, Miss., on the 26th:

The hail on the afternoon of the 26th ranged from the size of a walnut to that of a goose egg. I measured the larger ones and found several pieces 3 inches long by 2½ inches wide. About 2 miles northwest from the location of the gage pieces were found 9 inches in circumference, generally not smooth, but irregular shape. Many windows were broken, and in one case a roof was punctured with large holes.

Florida.—Report by W. F. Reed, jr., observer, Pensacola, Fla., on the destructive rainstorm of March 9–10, 1913.

The thunderstorm of the 9th and 10th were attended by excessive rains and squalls, and the precipitation in 24 hours was 8.32 inches, the greatest rain for the period on record. Streets and yards in all low sections of the city were flooded, and sewers were taxed beyond their capacity. The greatest damage occurred in the section known as "Long Hollow," especially on Guillemarde and Tarragona Streets from De Soto to Gadsden, where the water was up to the floors of cottages.

RIVER CONDITIONS.

More or less destructive floods occurred in all the important rivers in the district and the following accounts are extracted from the reports of the officials of the United States Weather Bureau in charge of the various river districts throughout the territory covered.

Richmond, Va.—*The James River.*—By Edward A. Evans, section director:

The flood in the James River from the 27th to 31st of March resulted from heavy rains in that part of the headwaters of the river lying in the Alleghany Mountains, no rains of consequence preceding the freshet in any other part of the basin. At Clifton Forge in Alleghany County the river rose to 28 feet, which is said to be the record height.

and at other points east as far as Lynchburg the highest stages in many years were recorded. East of Lynchburg the river was about as high as during the freshet of May, 1912.

The river began to rise rapidly at Buchanan on the 27th, attaining a maximum stage of 25.4 feet. By the morning of the 28th the high waters had reached Lynchburg, reaching 24.6 feet during the forenoon, and by 6 p. m. the crest of the high water was passing Norwood with 29 feet. At midnight of the same date it reached Scottsville with 24 feet, and at 8 a. m. of the 29th a maximum stage of 30 feet was reached at Columbia. Between Columbia and Richmond the rate of advance of the crest became slower, and it was not until 3 a. m. of the 30th that the highest water at Richmond, 17.5 feet, occurred. The water remained at a stand at Richmond from 3 a. m. to 9 a. m. on March 30 and then began to fall slowly, getting within its banks on the forenoon of the 31st.

Suitable warnings were issued on the 27th and 28th, and prompt action was taken by all interests to reduce the damage to a minimum. At Lynchburg, where the main damage was done, only material and structures that could not be moved, such as machinery and bridges, were damaged, and the loss in this way, as well as the expense entailed in cleaning up after the flood, was considerable. In the upper reaches of the river between Buchanan and Clifton Forge the tracks of the Chesapeake & Ohio Railroad were under water at numerous points during the night of the 27th and on the 28th and train service was discontinued. Telegraphic communication was interrupted the morning of the 28th. A section of the county bridge spanning the river at Buchanan was carried away and the river gage at that point was lost.

No damage of importance was done at Richmond. The steamboat wharves were under water early on Saturday, and navigation was suspended until the Monday following.

The value of bridge property lost was about \$8,000, and of railroad property other than bridges, including public highways, about \$10,000. Repairs to machinery and cleaning up, etc., cost about \$16,000.

The money value saved as a result of the warnings was about \$15,000 at Richmond, and probably much more at Lynchburg.

Raleigh, N. C.—Rivers of North Carolina.—By C. H. Richardson, acting section director:

Heavy rains fell over the watershed of the Roanoke River on the 13th to 14th, and warnings were issued for a rise to about 42 feet at Weldon in about 48 hours. The water reached a stage of 41.8 feet on the 17th, and continued to rise slowly until the early morning of the 18th, the highest stage being 44.2 feet, or 14.2 feet above flood stage.

The warnings for the Roanoke were of more than usual value, as the rainfall at Weldon had been light and no rise was expected. Many cattle were grazing on islands and in bottoms along the river, and on receipt of the warnings were driven to the hills.

Moderate freshets occurred in the Cape Fear, the Neuse, and the Tar Rivers, for which suitable warnings were issued, and generally but little loss resulted.

Estimated money value of the property destroyed or damaged \$5,000. The money value of the property saved by the flood warnings was considerable.

Columbia, S. C.—Richard H. Sullivan, section director:

Santee, Edisto, and Salkahatchie River System.—Rainfall of from 1 to over 2 inches in the upper Saluda and Wateree drainage basins on the 1st resulted in high waters, ranging from 1.6 to 4.8 feet above flood stages in the lower Saluda, lower Wateree, and Congaree Rivers on the 2d and 3d. Decidedly heavier rainfall in practically the whole section between the 14th and 16th was followed by flood stages in nearly every river in South Carolina. The periods of high water in the several streams were: Lower Saluda, March 15 to 19, with a maximum stage of 21 feet at Chappells on the 16th, or 7 feet above flood stage; Broad, March 16 and 17, with a maximum of 19.5 feet at Blairs on the 16th, or 5.5 feet above flood stage; Catawba River, March 14 to 17, with a maximum of 19.1 feet at Catawba on the 16th, or 8.1 above flood stage; Wateree, March 15 to 18, with a maximum of 33 feet at Camden on the 17th, or 9 feet above flood stage; Congaree, March 15 to 18, with a maximum of 22.9 feet at Columbia on the 17th, or 7.9 feet above flood stage.

Pedee River system.—Periods of high water in the several drainage basins: March 2d and 16th to 19th with following crest stages, Cheraw, 36.3 feet on the 17th or 6.3 feet above flood stage; Black River, March 18 to 22, with a maximum of 12.9 feet at Kingstree on the 9th, or 0.9 feet above flood stage; Lynch, March 21 to 22, with a maximum of 15.7 feet at Effingham on the 21st, or 1.7 feet above flood stage, and the Waccamaw, March 29 to 30, with a maximum 7.4 feet at Conway, or 0.4 feet above flood stage.

Warnings were issued on the 14th, 15th, and 16th by the local forecaster at Charleston, S. C., which were promptly and thoroughly disseminated, the telegraph, telephone, mail, and daily press being utilized, and were received so well in advance that practically no losses of a preventable nature occurred. In the upper reaches of the Pedee or Yadkin, as it is known in North Carolina, railroad traffic was deranged by washouts and numerous bridges were swept away or badly damaged. Traffic was practically suspended for three days on the Southern

between Winston-Salem and North Wilkesboro on account of the destruction of a bridge spanning a small tributary near Donnoha. On the Elkin & Alleghany Railway traffic was suspended for about a week. In South Carolina the losses were almost wholly due to enforced suspension of business. Live stock and all movable machinery belonging to the various lumber companies were removed to places of safety well in advance of the flood.

Money value of the property destroyed or damaged, including railroads, public highways and bridges, also cost of cleaning up, etc., about \$50,000. Loss caused by enforced suspension of business about \$20,000.

The money value of the property saved by the flood warnings of the Weather Bureau about \$75,000.

Georgia—The Savannah River.—E. D. Emigh, local forecaster, Augusta, Ga.:

The freshet in the Savannah River at Augusta on March 15–16, 1913, was the result of heavy rains on several days which necessitated the issue of four river forecasts. On Thursday, March 13, when the river stood at 14.3 feet at Augusta, on telegraphic reports showing an average of 0.79 inch of rain over the upper watershed, a stage of from 20 to 21 feet by Friday morning was predicted. On Friday forenoon the river reached a stage of 19 feet. On receipt of further rainfall reports giving an average additional rainfall of 0.91 inch, a prediction for 25 to 27 feet by Saturday morning was made. On Saturday morning, based on an average rainfall of 2.12 inches for the 24 hours ending at 8 a. m. the most important forecast, indicating a possible stage of from 33 to 35 feet, was made.

The forecast made Saturday, March 15, for a stage of 33 to 35 feet was verified by a stage of 35.1 feet at Augusta at 10 a. m. Sunday, March 16.

Pursuant to a plan arranged some months ago, Mr. James J. Farrell, secretary of the Augusta Chamber of Commerce, was busy throughout the day duplicating and posting bulletins and disseminating them by telephone, supplementing in a highly efficient manner through his own efforts the work of this office, the newspapers, and the city bridge keeper. Preparations for the coming flood proceeded in an orderly manner and without undue excitement, and by nightfall all business houses were fully prepared for the occurrence of a stage higher than was predicted.

Owing to the effective work of the Beaver Dam Ditch, which was built to carry off sewerage after the completion of the levee which is about to be constructed and which did excellent work during the freshet of 1912, the water in the streets at a distance from the river was about 4 feet lower this year than last, though the maximum river stages were, respectively, 35.1 and 36.8 feet.

The losses were approximately as follows: Money value of the property destroyed or damaged, including railroads, public highways and bridges, cleaning cellars, and putting machinery and equipment in serviceable condition, \$5,000. Damage to crops and live stock, \$18,000. Damage to farm property, \$2,000. Property saved by the warnings at least \$100,000.

Macon, Ga.—The Ocmulgee and Oconee rivers.—W. A. Mitchell, local forecaster:

The rise in the rivers due to the heavy rains of the last days of February had scarcely reached Lumber City on the Ocmulgee when rains began again in the upper watersheds of both the Ocmulgee and the Oconee, which became very heavy throughout the river district from the 12th to the 15th. Warnings were issued by mail on the 13th and on the 14th flood stages were predicted for both rivers, and these were supplemented on the 15th by warnings advising preparations for very high waters. All interests were warned as far as possible.

The rains continued throughout the 16th and the rivers continued to rise. The crest in the Oconee passed Macon at 10 a. m. of the 16th with a stage of 23.6 feet or 5.6 feet above flood stage, the highest since the establishment of the local weather office, but not quite as high as occurred during the freshet of August, 1887, when a stage of 24 feet was attained. The highest at Milledgeville was 33 feet on the 16th, or 8 feet above flood stage, and the crest reached Dublin on the 18th with a stage of 26.6 feet. In the Ocmulgee the maximum stages reached were 27 feet at Hawkinsville on the 19th, 19 feet at Abbeville on the 20th, and 21.1 feet at Lumber City on the 23d.

A levee protecting the freight yards in the lower portion of the city of Macon gave way during the night of the 15th and much damage resulted to tracks and freight in the railroad yards. The water rose about 3 feet in a large fertilizer plant and caused much damage. One railroad trestle in the vicinity was lost and another damaged, while tracks were washed badly in many places. The loss at Macon is estimated at about \$50,000. For the entire district the loss is estimated at about \$100,000, representing unavoidable losses such as bridges, damages to roads, etc. Owing to the warnings issued it is believed that many times the above-mentioned loss was saved, such as live stock, perishable goods, etc.

Atlanta, Ga.—The Chattahoochee and Flint rivers.—C. F. von Herrmann, section director:

The great storm of March 13–16 in the northern portion of the country was of exceptional interest from a meteorological point of view, because

it influenced an extremely wide area and was accompanied even in Georgia by excessive rains on three or four days that caused destructive floods in the State. As not much plowing had been accomplished early in the year the ground was compact and thoroughly saturated with water from previous heavy rains, so that the rainfall found its way rapidly to the rivers and the percentage of run-off was large.

The first intimation of possible floods in the Chattahoochee and Flint rivers came on the morning of March 13 when telegraphic reports of heavy rains were received at the local office of the Weather Bureau at Atlanta, the amounts ranging from 1.50 inches at Norcross to 3.22 inches at Butler. Although river stages were then relatively low, warnings were issued for a considerable rise with flooding of lowlands, which were extensively distributed by mail. Telegraphic reports on the morning of March 14 of additional heavy precipitation ranging from 1.25 to 2.60 inches made necessary telegraphic flood warnings which were issued at 10 a. m. indicating flood stages at all points on the Chattahoochee River below West Point and at all stations on the Flint River. The warnings were repeated on the morning of the 15th and the statement made that the flood would nearly equal the March flood of 1912.

The following table gives the rainfall over the watershed of the Chattahoochee and Flint rivers during the period from March 9 to 16, 1913:

CHATTAHOOCHEE BASIN.

Stations.	9 to 11	13	14	15	16
Atlanta.....	1.24	1.95	1.85	0.98	.....
Columbus.....	.81	2.60	1.26	2.37	0.48
Dahlonega.....	2.36	1.31	1.11	.97	.....
Eufaula, Ala.....	.02	2.88	.92	2.74	.73
Fort Gaines.....	.75	.45	1.75	1.50	.80
Gainesville.....	1.97	.87	1.52	.72	.....
Lost Mountain.....	2.80	3.25	.25	1.15	.....
Newnan.....	1.05	.18	2.00	.16	.....
Norcross.....	2.12	1.50	1.66	.68	.....
West Point.....	.87	2.53	.88	2.69	.80
Averages.....	1.46	1.75	1.32	1.40	.28

FLINT RIVER BASIN.

Stations.	9 to 11	13	14	15	16
Albany.....	0.65	1.00	1.50	1.50	0.77
Butler.....	.49	3.22	2.60	1.86	1.10
Concord.....	.57	2.00	1.75	5.44	.....
Marshallville.....	.30	3.37	.58	1.16	1.06
Montezuma.....	.26	2.90	.05	1.53	1.69
Putnam.....	.39	2.64	.95	2.22	.16
Talbotton.....	.60	2.53	2.13	2.94	.08
Woodbury.....	.60	1.89	1.24	5.50	.31
Averages.....	.48	2.44	1.35	2.74	.65

The river stages predicted and the crest stages ultimately attained are given below:

CHATTAHOOCHEE RIVER.

Stations.	Stages predicted.	Stages reached.		Highest previous stage.	Flood stages.
		Feet.	Date.		
Norcross.....		12.7	16	19.4	16
West Point.....	18 to 19.5 feet	18.3	15	25.6	20
Eufaula, Ala.....	48 feet.	54.5	17	56.0	40
Alaga, Ala.....	Over 40 feet.	40.2	18	38.2	30

FLINT RIVER.

Woodbury.....		14.6	15	14.0	10
Montezuma.....	22 to 26 feet..	23.0	18	26.0	20
Albany.....	30 to 32 feet..	30.3	21	32.4	20
Bainbridge.....	29.5 to 34 feet.	31.4	23	34.0	22

The Chattahoochee flood was of comparatively short duration, the crest of the flood moving from West Point to Alaga in three days, and the river at the lowest river station passed below flood stage on March 22. In the Flint River, however, the movement of the flood waters was much slower; the crest at Woodbury occurred March 16, at Montezuma, 75 miles beyond, on March 18, at Albany 53 miles farther, March 21, and at Bainbridge 77 miles beyond Albany on March 23; at the latter station flood stages continued until March 30.

The damage done by the flood was very considerable, but no lives were lost. The chief loss of property was incurred by railroad and steamboat companies. Lowlands had not been plowed nor had any crops been planted, but there was some loss of fertilizers that had been hauled for distribution. The interruption of railway traffic by wash-outs resulted in the loss of some fruit shipments from Florida. The losses may be summarized conservatively as follows:

- (1) Damage to railroad property, logging railroads, county bridges, and warehouses belonging to steamboat companies, \$50,000.
- (2) Damage to farm property, \$20,000.
- (3) Loss of live stock, \$5,000.
- (4) Cost of cleaning up premises and repairs to machinery, \$6,000.
- (5) Enforced suspension of business, mostly to turpentine operators, \$22,000.

The money value of the property saved by the Weather Bureau warnings was over \$50,000. The following expressions of opinion as to the value of the warnings are of interest:

Capt. H. L. Kendle (general manager of the Merchants & Planters Steamboat Co.) stated that the steamboat company was probably able to save equipment and merchandise amounting to about \$50,000 by general knowledge of the flood beforehand, and that the amounts saved by farmers and others interested along the river is inestimable. (Letter from John S. Blecker, Columbus, Ga., Mar. 31.)

I would say that the flood warnings received from the local office of the Weather Bureau at Atlanta were invaluable to us, as on receipt of same we immediately proceeded to keep our logs off the booms at the creek, only putting in enough to run us from day to day, consequently we did not lose any logs to speak of. (Stuart Lumber Co., J. A. McKintosh, general manager, Apr. 11, 1913).

I think the value of the live stock lost as near as I can get at was about \$450 to \$500, but the people who suffered these losses have advised me that they could easily have been prevented had it not been for the carelessness of their managers or overseers, as they were warned in plenty of time by the Weather Bureau telegrams. (Letter from J. C. Collins, Montezuma, Mar. 26, 1913).

Montgomery, Ala.—The Alabama River.—P. H. Smyth, section director:

Flood stages were nearly reached in the Coosa River at Gadsden, Ala., on March 15-20, and at Lincoln, Ala., March 15-18, the maximum stages being 22 feet at Gadsden (flood stage 22 feet) and 16.5 feet at Lincoln (flood stage 17 feet). The crest in the Coosa River reached Wetumpka on March 17 with a maximum stage of 46.4 feet or 1.4 feet above flood stage; the river fell below the flood stage at this point on the morning of the 18th.

The Alabama River at Montgomery was above flood stage from March 15 to 22, with a maximum stage of 48.1 feet on the 17th (flood stage 35 feet); and at Selma it was above flood stage from the 14th to the 26th, with a crest on the 19th of 49.4 feet, or 14.4 feet above flood stage.

Timely and accurate warnings were issued, and much property was saved. The loss by the flood exceeded \$5,000.

Mobile, Ala.—Tombigbee and Black Warrior Rivers.—Albert Ashenberger, local forecaster:

The Tombigbee at Demopolis remained above flood stage the entire month, and high stages continued in the upper Tombigbee during the greater part of the month; the mean stage at Demopolis was 47.7 feet (flood stage 35 feet) and the maximum stage was 50.3 feet on the 15th; the minimum stage at Demopolis was only 38.3 feet on the 1st. The Black Warrior was above flood stages during the first three days of March, with a maximum at Tuscaloosa, Ala., of 55.7 feet on the 1st, or 12.7 feet above flood stage; and it was again above flood stage from the 14th to the 16th with a second crest of 50.9 feet at 8 a. m. on the 15th. Flood warnings were issued, and a report will be made when the flood shall have subsided.

Meridian, Miss.—Pearl and Pascagoula Rivers.—J. H. Jaqua, assistant observer:

The heavy rains at the close of February caused a considerable rise in the Chickasawhay, the Pearl, and the Pascagoula Rivers in Mississippi, with flood stages, however, only at Jackson on the Pearl, where a stage of 22 feet occurred on March 3; the river at that point was 24.2 feet on March 9 (flood stage 20 feet).

On March 9 and 10 excessive rains occurred over the watershed of the Pearl River averaging 3.04 inches and also over the watershed of the Pascagoula River averaging 2.06 inches. Warnings for floods in the Pearl River were issued on March 10 as follows:

PEARL RIVER.

Stations.	Stage predicted.		Stages reached.		Flood stages.
	Feet.	Date.	Feet.	Date.	
Jackson.....	30.5	20	29.0	18-19	20
Columbia.....	19	14	.....	.....	18
Pearl River.....	15	15	15.8	16	12

Another period of heavy rains began on March 12, giving an average rainfall of 2.36 inches over the basin of the Pearl, the amounts ranging from 0.80 inch at Pearl River, La., to 4.76 inches at Columbia, Miss., while the average over the basin of the Pascagoula River was 3.73 inches, the amounts ranging from 1.96 inches at Meridian, Miss., to 5.96 inches at Merrill. Warnings for flood stages were issued on the 13th as follows:

CHICKASAWAHAY RIVER.

Stations.	Stage pre- dicted.		Stage reached.		Flood stage.
	Feet.	Date.	Feet.	Date.	
Enterprise.....	27	15 or 16	23.8	16	18
Shubuta.....	35	17	31	15	25

PASCAGOULA RIVER.

Merrill.....	22.5	19	21.5	19	20
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PEARL RIVER.

Stations.	Stage pre- dicted.		Stage reached.		Flood stage.
	Feet.	Date.	Feet.	Date.	
Columbia.....	21	17	22.7	17	18

The Pearl River at Jackson was above the flood stage from January 25 to February 24, and from February 28 to March 29; at Edinburg from March 2 to 20 except the 8th and 9th; at Columbia from March 13 to 29; and at Pearl River, La., from January 16 to April 9. At Shubuta on the Chickasawhay River the flood stage was exceeded from March 13 to 21 and at Merrill on the Pascagoula from March 14 to 23.

Business was interfered with in the lower Pearl River Basin for a time averaging about 15 days during the latter half of March and the first week in April. At Merrill, railroad traffic was delayed for two days on account of washouts, and regular business was interrupted for about 10 days, from the 14th to the 24th.

The losses were as follows: (1) Money value of the property destroyed or damaged \$12,600; (2) crops destroyed, \$2,300; (3) value of live stock lost, \$2,600; (4) losses occasioned by enforced suspension of business, \$8,000.

The property saved by the warnings of the Weather Bureau is estimated at \$20,000.

TABLE 1.—Climatological data for March, 1913. District No. 2, South Atlantic and East Gulf States.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
Virginia.																					
Arvonnia.	Buckingham.	350	9	51.4	+ 6.9	77	25	18	7	37	5.55	+ 1.75	1.79	T.	11	12	11	8	sw.	Rev. Plummer F. Jones.	
Ashland.	Hanover.	221	22	51.0	+ 5.5	78	26	20	7	33	5.11	+ 1.70	2.55	T.	6	11	11	9	s.	E. L. C. Scott.	
Buchanan.	Botetourt.	820	9								5.74	+ 3.22	2.20	0	8					D. D. Booze.	
Callaville.	Brunswick.	250	19	52.0	+ 2.7	81	26	16	7	37	6.22	+ 1.44	2.39	0	9	16	10	5	u.	F. M. Gage.	
Cape Henry.	Princess Anne.	20	39	54.6	+ 8.0	81	26	28	7	35	2.70	+ 1.62	0.99	0	11	12	8	11	sw.	U. S. Weather Bureau.	
Catawba.	Roanoke.	1,760	2	48.9		73	25	15	7	40	6.48		2.00	T.	9	17	9	5	w.	State Board of Health Sanitarium.	
Charlottesville.	Albemarle.	800	24	49.8	+ 3.1	75	25+	16	7	36	5.95	+ 2.74	2.06	0	11	14	4	13	sw.	Leander McCormick Obs.	
Clarksville.	Mecklenburg.	286	19								5.25	+ 1.73	1.50	0	10					J. A. Ligon.	
Columbia.	Fluvanna.	246	15	49.8	+ 5.1	77	26+	17	7	38	5.37	+ 2.30	1.60	0	8	14	3	14	s.	Chesapeake & Ohio Ry.	
Danville.	Pittsylvania.	413	13								5.13	+ 2.26	1.92	0	13					C. G. Watkins.	
Diamond Springs.	Princess Anne.	25	3	56.1		80	25	25	7+	31	2.64		0.66	0	9	17	11	3		Va. Truck Exp. Station.	
Dry Bridge.	Chesterfield.	325	2								3.81		1.00	0	8					Dr. E. W. Magruder.	
Hampton.	Elizabeth City.	5	30	54.4	+ 6.5	76	25	28	7	23	2.15	+ 1.73	0.60	0	7	11	7	13	s.	Normal and Agricultural In.	
Hot Springs.	Bath.	2,195	21	44.8	+ 2.1	74	26	10	7	46	5.81	+ 2.13	2.16	0	10	16	8	7		J. S. MacElveen.	
Ivor.	Southampton.	87	4	53.2		82	26	19	7	38	2.65		0.90	0	4					N. & W. Ry. Exp. Farm.	
Lassiter.	Goocland.	100	3								7.66		2.95	0	8	23	3	5		T. J. Davis.	
Lexington.	Rockbridge.	1,060	36	47.2	+ 3.1	75	25	15	7	34	4.95	+ 1.64	1.62	T.	10	15	8	8		Virginia Military Institute	
Lynchburg.	Campbell.	685	42	50.2	+ 4.8	76	31	20	7	40	5.50	+ 1.69	2.56	0	11	12	10	9	sw.	U. S. Weather Bureau.	
Newport News.	Warwick.	56	10	53.5		79	25+	23	7	31	3.06		0.72	0	12	14	8	9	sw.	C. W. Ashby.	
Norfolk.	Norfolk.	92	43	54.7	+ 7.0	78	25	26	7	33	1.99	+ 2.29	0.62	0	11	12	7	12	sw.	U. S. Weather Bureau.	
Petersburg.	Dinwiddie.	60	26	53.9	+ 5.9	82	26+	24	7+	40	4.37	+ 1.00	1.15	0	8					Walter Edward Harris.	
Randolph.	Richmond.	334	9								4.26		1.25	0	9					W. J. Abbt.	
Richmond.	Henrico.	144	34	52.0	+ 5.1	80	26	21	7	34	3.53	+ 0.19	1.04	0	11	9	8	14	s.	U. S. Weather Bureau.	
Roanoke.	Roanoke.	907	3	49.6		73	20+	18	7	40	4.38		1.75	0	10	16	10	5	w.	Reese F. Bell.	
Rocky Mount.	Franklin.	1,150	19	50.5	+ 2.1	74	20+	19	7	37	5.71	+ 1.68	2.80	0	10					G. W. B. Hale.	
Ruckersville.	Greene.	625	2	49.4		78	25	17	8	38	5.37		2.13	0	12					Dr. Jesse Ewell.	
West Point.	King William.	1	1	53.4		85	25+	22	7+	34	3.35		0.95	0	12	17	7	7	sw.	C. L. Maskey.	
Williamsburg.	James City.	70	22	54.0	+ 7.4	80	26+	22	7	32	4.99	+ 0.73	2.70	0	9	20	6	5	sw.	Eastern State Hospital.	
North Carolina.																					
Aibemarle.	Stanly.	700	1	54.6		81	26	23	3	40	7.86		1.45	0	13	18	4	9	sw.	M. J. Harris.	
Beaufort.	Carteret.	10	12	58.2	+ 3.9	73	24+	33	7	28	5.47	+ 1.06	1.41	0	11	13	6	12	s.	Lewis Radcliffe.	
Beaufort.	Beaufort.	4	4								3.99		1.20	0	11	18	5	8	s.	A. L. Bell.	
Brewers.	Wilkes.	1,950	16	50.3	+ 2.1	74	31	20	3+	36	7.79	+ 1.83	3.52	T.	13	8	10	13	w.	W. L. Brewer.	
Caroleen.	Rutherford.	806	13	52.5	+ 0.1	79	31	24	3	37	7.40	+ 2.60	1.69	0	14	13	9	9	sw.	S. B. Tanner.	
Chaybeate Springs.	Harnett.	500	7	56.2		81	25+	21	3+	44	3.72		0.84	0	13	15	8	8	s.	J. A. Smith.	
Chapel Hill.	Orange.	500	55	54.1	+ 4.7	83	26	23	7	37	4.99	+ 0.48	1.50	0	11	17	7	7	sw.	Prof. A. H. Patterson.	
Charlotte.	Mecklenburg.	773	37	53.6	+ 2.8	79	26	28	7	34	5.80	+ 1.23	1.35	0	11	10	7	14	s.	U. S. Weather Bureau.	
Chimney Rock.	Rutherford.	1,150	3	51.6		78	31	24	7	40	9.53		4.33	0	10	19	6	6	w.	J. M. Flack.	
Durham (near).	Durham.	406	4								5.59		1.10	0	10					J. C. Michie.	
Eagle town.	Northampton.	66	8	55.9		80	21+	24	8	35	4.92		1.45	0	12	16	10	5	sw.	T. J. Elliott.	
Edenton.	Chowan.	30	19	56.8	+ 5.2	78	24+	25	8	38	6.81	+ 2.57	2.21	0	11	13	8	10	sw.	E. R. Conger.	
Elizabeth City.	Pasquotank.	8	1	57.0		78	31	25	7	33	4.30		1.30	0	8	16	5	10	sw.	W. J. Simmons.	
Elizabethtown.	Bladen.	60	2								6.26		2.00	0	8					J. W. Hall, jr.	
Elkin.	Surry.	874									7.03		3.84	0	9					C. L. Myers.	
Enfield (near).	Halifax.	99	2								5.14		1.05	0	12					T. S. Inboden.	
Fayetteville.	Cumberland.	170	26	57.8	+ 3.4	82	26+	25	7	40	5.10	+ 0.10	1.18	0	13	11	2	18	sw.	Frank Glover.	
Globe (near).	Caldwell.	1,800	1	47.8		72	31	18	7	37	10.69		3.01	0	7	16	4	11	s.	Julius L. Gragg.	
Goldboro.	Wayne.	102	43	54.4	+ 2.1	80	21+	25	7	39	4.68	+ 0.22	1.19	0	14	16	10	5	se.	Mrs. J. J. Robinson.	
Gorge (near).	Caldwell.	1,385	1	49.2		76	31	19	7	41	8.76		3.09	0	11	1	21	9	sw.	A. J. Bagley.	
Graham.	Alamance.	656	11								7.24	+ 3.15	1.81	0	13					Dr. W. R. Goley.	
Greensboro.	Gulford.	843	32	51.4	+ 1.1	76	26	23	7	38	5.57	+ 1.08	1.63	0	15					A. H. Horry.	
Greenville.	Pitt.	75	20								5.83	+ 1.21	1.87	0	13					R. M. Hearne.	
Hatteras.	Dare.	11	39	58.0	+ 6.6	73	27	34	7	25	3.83	+ 1.64	1.14	0	14	9	7	15	sw.	U. S. Weather Bureau.	
Henderson.	Vance.	508	40	53.2	+ 2.6	81	26	21	7	34	3.75	+ 0.95	0.95	0	11	14	12	5	se.	Enoch Powell.	
Hickory.	Catawba.	1,165		52.0		76	31	22	7	37	5.97		1.60	0	14	9	12	10	s.	Frank B. Gwin.	
Kings Mountain.	Cleveland.	952	1	53.2		80	31	25	7	34	6.73		2.40	0	9	17	6	8	sw.	G. T. King.	
Kinston.	Lenoir.	46	15	58.4	+ 3.8	83	21+	26	8	43	7.97	+ 3.35	1.90	0	10	14	6	11	sw.	H. C. V. Peebles.	
Lincolnton.	Lincolnton.	994	7	52.0		80	31	20	7	39	7.27		2.02	0	7	13	11	7	sw.	S. P. Houser.	
Louisburg.	Franklin.	375	22	54.4	+ 3.6	80	26	24	7	39	6.27	+ 0.66	1.10	0	9	18	7	6	sw.	T. B. Wilder.	
Lumberton.	Robeson.	102	30	57.4	+ 3.2	83	26	28	7	42	6.52	+ 2.64	2.36	0	13					ne.	
Manteo.	Dare.	12	8	56.1		78	31	27	3	32	4.85		1.30	0	10	11	10	10	sw.	B. M. Davis.	
Marion.	McDowell.	1,425	21	50.6	+ 0.3	79	31	20	7	38	8.44	+ 3.11	3.70	0	14	16	6	9	w.	U. S. Weather Bureau.	
Middletown.	Hyde.	4	2	54.7		76	31	27	7	30	8.91		2.35	0	11					Sergt. Thomas McGuire.	
Moncure.	Chatham.	145	19	54.2	+ 1.6	81	26	22	3+	40	4.73	+ 0.54	2.22	0	12	19	5	7	sw.	J. S. Mann.	
Monroe.	Union.	586	19	54.2	+ 1.9	81	26	21	3	36	7.52	+ 3.37	1.73	0	9	15	4	12	sw.	B. J. Utley.	
Morganton.	Burke.	1,135	26	51.8	+ 2.0	73	26+	23	7	38	8.64	+ 4.33	3.79	0	12	19	3	9	se.	T. A. Ashcraft.	
Mount Airy.	Surry.	1,048	25	50.4	+ 4.0	75	31	20	3+	41	7.13	+ 3.11	3.05	0	10	17	5	9	nw.	J. B. P. Massey.	
Mount Holly.	Gaston.	616	16								6.79	+ 2.49	1.73	0	14					Prof. A. H. Merritt.	
Nashville.	Nash.	190	9	55.4		81	21	23	7	41	4.52		1.40	0	10	13	7	11	s.	J. W. Holland.	
Neuse.	Wake.	266	1								3.67		1.21	0	11					J. B. Boddie.	
Newbern.	Craven.	12	31	58.3	+ 4.4	77	21	31	7	31	8.58	+ 4.52	2.41	0	13	9	9	13	sw.	E. M. Allen.	
North Wilkesboro (near).	Wilkes.	1,700	1	50.4		72	26	20	7	36	9.52		3.80	0	10	13	7	11	w.	J. B. Hill.	
Parkersburg.	Sampson.	121	1	57.0		83	21	23	8	45	7.33		2.00	0	10	19	5	7	w.	Dr. Charles A. Willis.	
Pinehurst.	Moore.	650	9	52.9		79	31	24	7	37	5.21		1.32	0	10	13	7	11	w.	E. J. Conway.	
Pittsboro.	Chatham.	480	20								4.45	+ 0.28	1.20	0	8	16	6	9	sw.	General Office.	
Raleigh.	Wake.	390	42	54.4	+ 4.0	78	31	26	7	35	3.63	+ 0.63	1.15	0	13	13	5	13	sw.	Mrs. J. F. Alston.	

TABLE 1.—*Climatological data for March, 1913. District No. 2—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.						Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of overcast days.				
North Carolina—Contd.																						
Tryon (near).....	Polk.....	1,300	1	51.2	.....	76	31	23	7	33	8.02	+ 2.54	1.70	0	14	17	3	11	se.	C. E. Carman.	
Weldon.....	Hallfax.....	81	41	53.6	+ 5.1	80	26	24	8	41	3.31	- 0.81	1.07	0	10	13	7	11	s.	H. S. S. Cooper.		
Willard.....	Pender.....	51	5	56.9	.....	79	26†	25	8	42	8.12	.....	3.12	0	9	17	1	13	s.	J. H. Jefferies.
Wilmington.....	New Hanover.....	52	42	58.1	+ 4.4	78	31	32	7	28	4.88	+ 1.29	1.68	0	13	8	11	12	s.	U. S. Weather Bureau.		
South Carolina.																						
Aiken.....	Aiken.....	565	18	57.9	+ 2.2	84	26	27	7	38	6.77	+ 2.54	1.70	0	7	17	3	11	se.	C. E. Carman.		
Allendale.....	Allendale.....	186	24	56.2	+ 1.5	80	22†	31	3†	36	9.25	+ 5.57	2.70	0	7	17	0	14	.....	Richard Hiers.	
Anderson.....	Anderson.....	764	11	55.4	+ 2.1	82	25†	25	7	39	7.84	+ 2.54	1.07	0	9	13	3	15	w.	H. H. Russell.		
Batesburg.....	Lexington.....	656	24	56.4	+ 0.8	84	25	28	28	36	11.33	+ 6.81	2.29	0	12	12	4	15	n.	E. J. Hite.		
Beaufort.....	Beaufort.....	20	26	56.3†	+ 3.1	78	25†	36	3†	36	5.72	+ 2.38	2.00	0	7	.....	.....	.....	sw.	Miss Lillian H. Rice.
Blackville.....	Barnwell.....	296	23	58.8	+ 0.6	58	26	29	3	38	8.82	+ 5.29	2.39	0	12	14	7	10	sw.	Miss M. E. Lange.		
Blairs.....	Fairfield.....	293	7	.....	.....	.....	.....	.....	.....	.....	5.62	.....	1.95	0	7	17	2	12	s.	J. N. Owens.
Bowman.....	Orangeburg.....	160	11	58.0	- 1.3	82	25	30	8	36	12.30	+ 9.66	2.85	0	11	16	7	8	sw.	B. O. Evans.		
Broxton.....	Hampton.....	.....	2	.....	.....	.....	.....	.....	.....	.....	10.72	.....	3.60	0	9	11	5	15	.....	Thomas D. Williams.
Calhoun Falls.....	Abbeville.....	508	19	.....	.....	.....	.....	.....	.....	.....	7.88	+ 3.29	2.50	0	10	15	0	16	s.	L. M. Parker.
Camden.....	Kershaw.....	222	46	58.0	.....	81	25†	27	7	34	7.02	+ 3.48	1.58	0	12	14	4	13	ne.	W. C. Brown.	
Catawba.....	York.....	562	7	.....	.....	.....	.....	.....	.....	.....	8.05	.....	1.56	0	14	13	1	17	s.	James C. Faris.
Chappells.....	Newberry.....	402	7	.....	.....	.....	.....	.....	.....	.....	7.03	.....	2.10	0	8	20	0	11	nw.	J. J. Murrain.
Charleston.....	Charleston.....	48	42	60.0	+ 2.8	79	31	39	28	25	3.80	+ 0.08	1.47	0	13	5	12	14	ne.	U. S. Weather Bureau.		
Cheraw.....	Chesterfield.....	144	24	57.4	+ 3.5	84	26	27	7	39	6.20	+ 2.54	1.70	0	16	14	3	14	s.	J. H. Powe.		
Clemson College.....	Oconee.....	850	21	54.0	+ 0.9	80	26	26	7	30	7.38	+ 2.58	1.44	0	10	14	7	10	w.	Prof. John N. Hook.		
Columbia.....	Richland.....	351	26	57.4	+ 3.4	83	26	31	7	32	6.85	+ 3.15	2.28	0	11	10	9	12	sw.	U. S. Weather Bureau.		
Conway.....	Horry.....	25	20	60.8	+ 3.7	83	22†	30	8	46	5.85	+ 2.16	1.80	0	9	11	1	19	w.	Paul Quattlebaum.		
Dillon.....	Dillon.....	100	8	58.4†	+ 2.6	84	26	29	8	35												

TABLE 1.—Climatological data for March, 1913. District No. 2—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.		
Georgia—Continued.																			
Lisbon	Lincoln	326	6	56.4	—	83	26†	25	7	38	7.75	—	2.00	0	12	—	—	—	B. J. Du Bose.
Lost Mountain	Cobb	1,175	13	53.8	— 1.3	78	27	24	3†	38	11.08	+ 5.97	3.10	0	10	2	22	7	A. N. Mayes.
Lumber City	Telfair	150	4	—	—	—	—	—	—	—	6.60	—	1.78	0	12	9	4	18	Walter A. Hilton.
Macon	Bibb	370	32	56.8	— 0.1	83	26	30	7	38	11.58	+ 6.14	3.87	0	11	10	6	15	U. S. Weather Bureau.
Marshallville	Macon	500	20	58.2	— 1.1	84	26	28	3	35	12.42	+ 7.06	3.62	0	13	9	8	14	E. C. Bryan.
Milledgeville	Baldwin	278	25	55.4	— 0.2	85	26	29	3†	32	12.64	+ 7.40	3.27	0	14	13	4	14	Prof. O. M. Cone.
Millen	Jenkins	158	25	59.4	+ 0.9	86	25†	31	3†	37	9.25	+ 5.56	3.30	0	10	—	—	—	M. G. McComb.
Montezuma	Macon	292	8	—	—	—	—	—	—	—	11.55	—	2.90	0	15	10	3	18	J. C. Collins.
Monticello	Jasper	800	18	54.5	+ 1.8	81	26	27	7	34	10.38	+ 4.71	2.17	0	15	20	7	4	Miss Maude Penn.
Newnan	Coweta	959	24	53.4	— 2.0	81	25†	26	7	36	7.24	+ 1.40	2.00	0	13	—	—	—	Mrs. Ida J. Milner.
Norcross	Gwinnett	1,078	3	—	—	—	—	—	—	—	9.05	—	1.84	0	14	13	2	16	W. O. Medlock.
Point Peter	Oglethorpe	600	23	52.2	— 0.4	78	26	25	7	37	9.36	+ 4.34	2.10	0	10	11	9	11	C. M. Wittcher.
Poulan	Worth	365	23	60.6	+ 1.3	84	24	32	3	30	8.61	+ 3.78	2.03	0	13	14	10	7	C. T. Merritt.
Putnam	Marion	13	56.8	+ 2.8	86	26	26	3	37	12.44	+ 7.69	2.64	0	11	13	9	9	—	Miss Mildred Collum.
Quitman	Brooks	173	27	63.3	—	85	13†	37	3†	30	5.36	+ 1.38	1.09	0	7	10	4	17	A. B. Jones.
Ramhurst	Murray	900	20	54.2	— 0.3	75	25†	25	3†	37	7.95	+ 2.14	2.34	0	10	11	8	12	D. E. Humphreys.
Resaca	Gordon	657	19	—	—	—	—	—	—	—	8.30	+ 2.50	2.75	0	8	14	4	13	D. A. Norton.
Rome	Floyd	576	54	52.0	— 1.5	81	31	25	4	40	7.09	+ 1.39	2.10	0	11	15	5	11	W. M. Towers.
St. George	Charlton	50	6	62.8	—	85	26	36	5	37	4.76	—	1.27	0	11	9	11	11	A. N. Lund.
St. Marys	Camden	20	22	63.4	+ 1.9	86	10†	37	3	33	6.26	+ 3.16	1.25	0	14	5	11	15	David C. Sterling.
Savannah	Chatham	65	62	60.8	+ 1.1	81	21	38	7	26	5.25	+ 1.58	2.56	0	13	6	10	15	U. S. Weather Bureau.
Statesboro	Bulloch	253	13	61.2	+ 0.4	87	26	33	3	30	5.67	+ 1.27	1.17	0	12	8	16	7	W. C. Cromley.
Talbotton	Talbot	750	19	57.8	+ 0.1	82	26	28	36	14.61	+ 8.69	2.94	0	13	—	—	—	—	Dr. E. L. Bardwell.
Tallapoosa	Haralson	1,150	14	51.8	—	78	25†	24	3†	38	9.27	+ 3.86	2.30	0	11	12	5	14	Miss Averil L. Southard.
Thomasville	Thomas	273	31	61.4	— 0.4	83	24	34	3	31	5.83	+ 1.64	1.23	0	15	6	11	14	U. S. Weather Bureau.
Tifton	Tift	370	1	59.8	—	84	13†	32	3†	32	7.40	—	1.90	0	12	—	—	—	J. F. Hart, jr.
Toccoa	Stephens	1,050	27	52.8	0.0	81	31	25	7	39	8.19	+ 2.09	1.85	0	15	15	10	6	J. A. Creasy.
Valdosta	Lowndes	220	8	62.2	—	89	14	33	3	37	6.75	—	2.00	0	10	—	—	—	Miss Annie Twitty.
Valonia	McIntosh	10	15	—	—	—	—	—	—	—	4.12	+ 1.04	1.33	0	8	—	—	—	George E. Atwood.
Washington	Wilkes	630	22	54.5	— 1.7	82	26	24	3	37	9.25	+ 4.79	2.05	0	12	—	—	—	Miss Ella B. Smith.
Waycross	Ware	131	24	61.1	— 1.1	86	24	34	3	36	4.30	+ 0.94	0.66	0	14	9	8	14	Dr. J. F. Wilson.
Waynesboro	Burke	86	21	56.2	— 3.1	84	27	25	3†	39	7.54	+ 3.89	2.17	0	10	9	16	6	Mrs. H. W. Blount.
West Point	Troup	620	23	55.0	— 2.9	82	31	29	3†	35	12.72	+ 7.77	2.69	0	13	—	—	—	E. N. Dunn.
Woodbury	Meriwether	641	12	—	—	—	—	—	—	—	13.70	+ 8.73	5.50	0	12	13	4	14	E. T. Riggins.
Florida.																			
Apalachicola	Franklin	24	8	62.2	—	78	31	39	28	30	4.78	—	2.10	0	10	9	17	5	G. H. Whiteside.
Arcadia	De Soto	61	12	73.2	+ 4.6	90	21	53	7	28	3.26	— 0.09	0.90	0	16	4	23	4	C. S. Bushnell.
Archer	Alachua	92	28	67.8	+ 3.6	87	13	37	4	36	5.51	+ 2.04	1.72	0	10	—	—	—	R. B. Hodgson.
Avon Park	De Soto	150	14	71.6	+ 2.6	90	15	51	7	35	4.22	+ 2.04	0.97	0	14	15	10	6	William King.
Bartow	Polk	115	25	70.2	+ 2.6	87	13†	45	7	30	6.35	+ 4.02	1.04	0	15	8	10	13	William Hood.
Bassenger	Osceola	—	71.6	—	—	89	15	50	7	27	4.65	—	1.50	0	5	10	16	5	L. N. Kline.
Bradentown	Manatee	10	29	70.0	+ 3.2	90	12†	46	7	32	2.77	+ 0.20	0.80	0	7	13	14	4	F. H. Braymer.
Brooksville	Hernando	126	20	69.6	+ 3.2	90	12	45	3†	33	4.26	+ 1.94	1.03	0	9	—	—	—	C. C. Peck.
Carrabelle	Franklin	10	14	62.0	— 1.3	81	23	36	3†	32	5.70	+ 1.65	2.00	0	9	—	—	—	J. J. Blomquist.
Cedar Key	Levy	10	24	67.0	+ 3.7	86	23	42	3†	33	3.95	+ 0.99	1.07	0	10	—	—	—	J. B. Lutterloh.
Clermont	Lake	105	19	70.2	+ 1.1	88	15†	48	28	31	6.06	+ 4.15	1.30	0	10	14	14	3	S. S. Fester.
Crescent City	Putnam	—	15	69.4	+ 3.2	88	15†	44	28	28	7.72	+ 5.19	1.53	0	16	9	15	7	Water Cliff.
DeLand	Volusia	27	16	69.1	+ 2.7	88	15	41	3	33	—	—	—	0	16	11	16	4	A. C. Haynes.
Eustis	Lake	56	22	70.0	+ 2.8	90	13	42	3	35	6.28	+ 3.75	2.00	0	16	11	16	4	C. T. Smith.
Federal Point	Putnam	10	21	68.0	+ 3.2	89	13†	44	28	30	5.67	+ 2.66	0.96	0	14	9	19	3	E. S. Hubbard.
Fenbolloway	Taylor	75	6	63.9	—	85	13†	38	28	34	7.57	—	2.40	0	8	1	25	5	J. Wigglesworth.
Fernandina	Nassau	10	20	64.2	+ 1.5	85	10†	40	24	26	5.10	+ 1.98	0.70	0	26	5	13	13	W. B. C. Duryee.
Fort Lauderdale	Dade	10	—	76.2	—	89	2	57	7	25	2.29	—	0.45	0	13	9	18	4	William M. Heine.
Fort Meade	Polk	125	23	70.9	+ 3.4	89	13	43	7	36	5.37	+ 2.53	1.43	0	8	13	12	6	G. L. Brodrick.
Fort Myers	Lee	12	40	72.6	+ 3.8	88	26	56	3	23	0.94	— 1.12	0.45	0	3	21	7	3	Miss M. M. Gardner.
Fort Pierce	St. Lucie	10	12	73.4	+ 4.6	89	1†	59	4†	25	4.90	+ 1.98	1.20	0	10	16	11	4	T. C. Nicholson.
Gainesville	Alachua	176	17	67.1	+ 1.1	88	25	40	28	34	5.79	+ 2.78	1.70	0	15	7	4	20	John Schnabel.
Garniers (near)	Walton	22	1	—	—	—	—	32	3	—	10.37	—	6.39	0	13	—	—	—	U. S. Forest Service.
Grasmere	Orange	175	15	68.6	+ 1.1	89	13	43	28	32	8.45	—	1.67	0	14	20	6	5	J. B. Escott.
Griffin	Dade	—	72.6	—	—	86	11†	53	8	25	3.04	—	1.50	0	8	13	14	4	T. M. Griffin.
Hilliard	Nassau	69	4	65.0	—	85	13†	35	3	43	4.01	—	1.13	0	5	13	2	16	B. A. Tibbitts.
Hypoluxo	Palm Beach	9	17	74.8	+ 4.3	88	2	57	7	22	3.68	+ 1.13	0.79	0	13	15	11	5	G. A. Angvine.
Inverness	Citrus	43	13	67.8	+ 1.8	87	26	44	28	33	5.53	+ 2.58	1.70	0	8	6	15	10	W. H. Miller.
Jacksonville	Duval	108	42	64.8	+ 2.9	84	26	41	28	27	5.87	+ 2.35	1.34	0	17	6	12	13	U. S. Weather Bureau.
Jasper	Hamilton	152	12	64.0	+ 0.7	90	13	35	3	34	8.72	+ 5.06	4.00	0	12	6	12	13	Mrs. W. C. Caldwell.
Johnstown	Bradford	125	13	67.4	+ 2.3	88	13†	40	3	32	6.85	+ 3.99	3.34	0	12	7	13	11	A. M. C. Brasch.
Key West	Monroe																		

TABLE 1.—Climatological data for March, 1913. District No. 2—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.					Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		Prevailing wind direction.
Florida—Continued.																				
Satsuma Heights.	Putnam.	98	5	66.6 ^b		87 ^b	13 ^b	41 ^b	28	28	7.59		1.70	0	13	6	20	5	ne.	The Satsuma Co.
Switzerland.	St. Johns.	10	20	67.2	+ 3.4	87	13 ^b	41	3	30	4.38	+ 0.88	1.02	0	8				se.	Mrs. W. C. Steele.
Tallahassee.	Leon.	192	26	62.7	+ 1.3	83	23 ^b	35	28	31	7.20	+ 2.29	2.30	0	12	9	12	10	s.	W. H. Markham.
Tampa.	Hillsboro.	79	23	70.0	+ 4.1	86	22	49	3	26	3.09	+ 0.28	0.86	0	8	11	8	12	ne.	U. S. Weather Bureau
Tarpon Springs.	Pinellas.	20	28	70.0	+ 4.2	91	23	45	3	29	3.71	+ 1.24	1.19	0	10	22	5	4	w.	A. P. Albaugh.
Titusville.	Brevard.	16	17	70.4	+ 5.2	88	15	50	3	23	5.85	+ 3.20	1.10	0	19	9	6	16	e.	F. M. Taylor.
Wausau.	Washington.	250	13			84	23 ^b							0		12	6	13	s.	Curtis Jones.
Zona.	Dade.										6.32		1.95	0						W. S. Brooke.
Alabama.																				
Alaga.	Houston.	105	8								9.85		2.50	0	9					James L. Willis.
Andalusia.	Covington.	488		63.0 ^a		82	23 ^b	32	28	37	8.96		4.00	0	4					W. N. Rushton.
Anniston.	Calhoun.	728	22	53.6	+ 1.1	80	31	26	3	35	8.92	+ 3.14	2.80	T.	14	8	12	11	nw.	U. S. Weather Bureau.
Ashville.	St. Clair.	685	20	53.8	- 0.7	80	25	25	3 ^b	39	8.08	+ 1.82	2.00	0	9	12	10	9	se.	A. L. Cather.
Auburn.	Lee.	732	31	57.0	+ 0.8	82	26	28	17	35	12.39	+ 6.95	3.24	0	8	13	4	11	nw.	Dr. James T. Anderson.
Benton.	Lowndes.	149	12								15.46	+ 9.66	3.22	0	8					S. T. Pruitt.
Bermuda.	Conecuh.		26	59.1	+ 0.6	83	23	30	3	34	18.08	+ 13.25	5.72	0	14	13	8	10	se.	M. J. Morris.
Birmingham.	Jefferson.	701	25	54.6	- 1.7	81	25	26	7	34	5.96	+ 0.20	1.86	0	11	10	11	10	se.	U. S. Weather Bureau.
Calera.	Shelby.	500	12								9.13	+ 2.34	2.65	0	10					L. G. Privett.
Camp Hill.	Tallapoosa.	738	12	56.4	- 1.7	81	25 ^b	26	7	38	8.60	+ 3.27	1.61	0	10					Dr. Lyman Ward.
Citronelle.	Mobile.	331	25	60.4	- 1.7	82	21 ^b	32	28	33	15.02	+ 9.72	6.23	0	14	8	11	12	ne.	Rev. W. H. Rowe.
Clanton.	Chilton.	590	20	54.2 ^a	- 3.5	83		28	3 ^b	36	7.55	+ 1.94	1.88	0	12					Joseph B. Downs.
Cochrane.	Pickens.	100	3								6.86		2.00	0	5					T. H. G. Cooke.
Cordova.	Walker.	334	22	54.9	+ 0.3	82	25 ^b	23	7	46	6.70	+ 0.64	1.50	0	7	18	0	13	n.	Scott Maxwell.
Cullman.	Cullman.	802	5	51.8		80	26	22	7	39	3.87		1.40	T.	7	14	10	7	n.	Eugene A. Grayot.
Dadeville.	Tallapoosa.	760	8								9.51		2.00	0	12					Dr. W. B. Fulton.
Daphne.	Baldwin.		22	61.4	- 0.1	83	25	32	28	43	11.62	+ 5.51	3.90	0	11	12	7	12	se.	John H. Young.
Demopolis.	Marengo.		21								6.92	+ 1.55	2.13	0	6					George E. Pegram.
Dothan.	Houston.		29	58.7		83	26	33	28	27	11.60		2.70	0	10					L. G. Biggers.
Eufaula.	Barbour.	200	29	54.3	- 4.6	81	26	27	28	32	13.47	+ 7.25	3.42	0	13					Dr. J. B. Whitlock.
Evergreen.	Conecuh.	285	29	56.4	- 1.5	83	31	31	17	36	17.29	+ 12.00	4.23	0	12					George W. Salter.
Flomaton.	Escambia.	91	21	61.5	- 0.7	83	26	30	3 ^b	37	13.81	+ 9.54	2.91	0	8	13	5	13	n.	T. J. Farris.
Fort Deposit.	Lowndes.	520	29	60.0	+ 1.1	83	25	34	3 ^b	30	12.14	+ 6.75	3.03	0	10					J. F. Hattem.
Gadsden.	Etowah.	621	29	54.0	+ 0.6	79	25	26	3 ^b	36	9.29	+ 2.72	2.85	0	9					D. P. Goodhue.
Goodwater.	Coosa.	826	18	53.2	- 3.6	80	31	26	17 ^b	36	8.61	+ 2.56	1.98	0	11					Miss Daisy Buice.
Greensboro.	Hale.	220	34	55.5	- 1.2	82	25 ^b	31	7 ^b	31	8.34	+ 2.86	2.05	0	7					W. E. W. Yerby.
Greenville.	Butler.	444	12								17.86	+ 13.42	5.42	0	7					E. M. Lewis.
Hamilton.	Marion.		17	57.6 ^a	+ 2.6	82	31	22		44			3.22	0	8					Prof. H. O. Sargent.
Healing Springs.	Washington.	362	21	58.6	- 1.7	83	31	31	7 ^b	32	19.48	+ 13.81	8.25	0	10	11	8	12	s.	James E. Lipscomb.
Highland Home.	Crenshaw.		29	53.4	- 2.9	83	25 ^b	29	2 ^b	37	8.90	+ 3.71	2.90	0	5	13	0	18	e.	Prof. Samuel Jordan.
Livingston.	Sumter.	160	29	55.2	- 0.8	80	25	26	3	37	7.40	+ 1.59	2.00	0	12					Robert L. King.
Lock No. 4.	Talladega.	510	16	55.2	- 1.0	80	25	24	6	44	9.56	+ 2.70	3.15	0	9	12	10	9	nw.	U. S. Engineers.
Maple Grove.	Cherokee.		20	52.6							6.99		2.00	0	8					Mrs. A. L. Awbrey.
Mentone.	DeKalb.	1,595	6								11.60		2.60	0	14					E. Mason.
Milstead.	Macon.		10								10.58	+ 3.41	4.12	0	12	5	13	13	n.	W. U. Wall.
Mobile.	Mobile.	84	41	60.2	+ 1.1	79	22	37	28	24	10.58	+ 5.07	3.15	0	12	9	9	13	s.	U. S. Weather Bureau.
Montgomery.	Montgomery.	240	41	57.4	- 0.5	82	26	32	28	29	11.45	+ 5.82	2.03	0	12	9	9	13	s.	Do.
Newbern.	Hale.		21	57.2	- 1.3	86	25	24	17	38	7.26	+ 1.02	2.00	0	9	11	11	9	s.	Dr. J. Huggins.
Oneonta.	Blount.	857	19	54.5	- 0.1	81	25 ^b	23	7	44	5.74	+ 1.08	2.00	0	9	16	1	14	n.	Aquilla J. Ketchum.
Opelika.	Lee.	917	34	53.8	- 3.6	76	25	29	7	28	12.35	+ 6.69	2.35	0	11					A. H. Read, jr.
Ozark.	Dale.	400	11	58.2		82	24	31	29	35	12.60		3.00	0	9					James A. Scott.
Prattville.	Autauga.	281	13	58.6 ^a	- 0.7	84	23 ^b	27	17	38				0						Joseph B. Bell.
Pushmataha.	Choctaw.		22	57.2	- 2.3	86	26	28	3 ^b	36	8.77	+ 3.01	2.81	0	10	1	9	21	n.	W. N. Horn.
Robertsdale.	Baldwin.	148	1								16.96		6.30	0	13					Carl Bosc.
Selma.	Dallas.	147	33	56.8	- 2.0	85	31	29	17	38	7.47	+ 0.77	2.65	0	9					Charles F. Brisin.
Spring Hill.	Mobile.	312	9	59.8		84	21	33	28	30	11.51		3.60	0	15	12	10	9	n.	Spring Hill College.
Talladega.	Talladega.	554	23	56.4	- 0.4	83	31	26	17	40	7.24	+ 1.07	2.22	0	11	14	10	7	s.	W. E. Henkel.
Tallassee.	Elmore.		22								10.14	+ 3.94	2.48	0	14					P. A. Noble.
Thomasville.	Clarke.	385	22	53.8	- 6.1	85	31	29	28	40	6.68	+ 1.09	2.72	0	4					Miss H. T. Forster.
Troy.	Pike.	581	5	59.2		83	23 ^b	30	28	34	10.88		3.83	0	13	4	20	7	s.	Frank L. Zimmermann.
Tuscaloosa.	Tuscaloosa.	230	32								7.18	+ 1.43	2.00	0	10					W. S. Wyman, jr.
Tuskegee.	Macon.		13	56.8	- 3.0	83	26	28	17	44	15.10	+ 9.81	4.45	0	10	3	23	5	n.	Prof. George W. Carver.
Union Springs.	Bullock.	216	26	56.2	- 1.6	84	26	29	28	31	13.99	+ 7.77	4.65	0	11					P. L. Cowan.
Uniontown.	Perry.	273	27	58.0	- 0.6	83	26	31	3 ^b	42	7.57	+ 2.29	1.86	0	9	10	7	14	e.	L. H. Moore.
Valley Head.	DeKalb.	1,031	28	51.5	+ 0.3	77	31	20	7	40	7.38	+ 1.03	2.00	0	7	20	5	6	n.	M. T. Floyd, M. D.
Wetumpka.	Elmore.	205	21	58.8	- 1.2	85	31	30	3 ^b	36	9.73	+ 3.62	2.27	0	10					Mrs. Emmie Callaway.
Mississippi.																				
Aberdeen.	Monroe.	210	25	53.4	- 1.7	81	25 ^b	26	7	38	4.92	- 0.35	1.36	0	7	15	1	15	s.	L. D. Godfrey, jr.
Agricultural College.	Oktibbeha.	424	23	54.4	- 1.9	82	24 ^b	27	7	34	6.11	- 0.41	2.50	0	12	15	9	7	s.	J. R. Ricks.
Bay St. Louis.	Hancock.	38	20	60.6	- 2.1	80	26	36	28	31	7.22	+ 1.15	3.04	0	14					

TABLE 1.—*Climatological data for March, 1913. District No. 2—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees, Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.			Number of cloudy days.
Mississippi—Contd.																				
Monticello.....	Lawrence.....	209	6	58.6		83	26	29	17	38	7.32		3.28	0	11	8	13	10	e.	Dr. G. A. Teunisson.
Okolona.....	Chickasaw.....	311	25	50.7	- 4.6	80	25†	26	7†	40	6.33	+ 0.32	2.00	0	8	13	2	16	s.	F. J. Henson.
Pascagoula.....	Jackson.....	15	4	60.0		77	22†	36	28	25	13.28		4.38	0	11					McVey Young.
Pearlington.....	Hancock.....	10	25	61.3	- 1.2	84	21†	33	17	29	7.29	+ 1.57	1.63	0	10	7	10	14	e.	Miss Annette Koch.
Porterville.....	Kemper.....		8	55.8		84	25†	26	3	41	8.97		4.02	0	7	15	12	4	se.	I. S. Rea.
Shubuta.....	Clarke.....	197	8								8.29		3.66	0	11	18	1	12	s.	George A. Floyd.
Tupelo.....	Lee.....	278	14	54.0		84	23	26	7	35	4.95	- 0.75	1.95	T.	8	15	7	9	s.	W. S. Vincent.
Waynesboro.....	Wayne.....	191	26	56.8	- 1.0	84	26	29	3†	43	9.23	+ 4.38	3.25	0	9	7	4	20	n.	R. S. Burke.
Woodland.....	Chickasaw.....		4								4.45		1.30	0	7					J. L. Ricks.

* 1, 2, 3, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—Daily precipitation for March, 1913. District No. 2, South Atlantic and East Gulf States.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Virginia.																																	
Arvonla	James.						.01				.65	.20		.60	1.79	.62	.36	.26										.06	.42			.58	5.55
Ashland f.	do.										.12	.56		.15	1.73	.42					.08												5.11
Buchanan ||	do.										.08	.12		.35	2.39	.80					.90	.24											5.74
Callaville	Chowan.	.57									.13			.01	.61	.35	.12				.09	.24											6.22
Cape Henry	Coast.	.13					.04				.82	.13		.01	.61	.35	.12				.90	.09	.24										2.70
Catawba	Roanoke										.81	.12		.50	2.06	.67					.15	.25											6.48
Charlottesville.	James.		.04								.30			.41	.40	.41	1.50				.20	.18											5.95
Clarksville ||	Roanoke	.41	.10								.12			.14	.40	.41	1.50				.22												5.25
Columbia	James.										.85			.58	1.60	.76					.16												5.37
Danville ||	Roanoke	.02	.12								.56			.08	1.92	.40	.40				.06			.34									5.13
Diamond Springs.	Coast.	.20									.24			.04	.02	.50					.63	.26											2.64
Dry Bridge	James.										.32			.63	.74	.51					.46	.10											3.81
Hampton	Coast.	.15												.17	.99	.89	.45				.55	.21											2.51
Hot Springs.	James.								.04		.56	.17		.17	.99	.89	.45				.19												5.81
Ivor	Chowan.													.90	.05						.80	T.											2.65
Lassiter	James.										.65			.70	2.95	.85						.45											7.66
Lexington	do.		T.				T.				.85			.31	1.62	1.55			T.		.09	.05				.09							4.95
Lynchburg	do.										.68	.01		.72	1.88	.60					.04	.11	.36										5.50
Newport News	Coast.	.15									.05	.09	.02	.02	.49	.18	.40				.60	.17											3.06
Norfolk	do.	.15						.03			T.	.05		T.	.36	.31	.13				.50	.12	.08										1.99
Petersburg	James.										.40			.65	.70	.69	.38				.15	.10											4.37
Randolph ||	Roanoke.	.21	.03							*	.16			.65	.70	.69	.38					.17											4.26
Richmond.	James.	.03									.18	T.		.51	.70	.69	.38				.10	.75	.14										3.53
Roanoke.	Roanoke.										.60	.09		.32	1.75	.36					.07	.09											4.38
Rocky Mount.	do.										.60	.08		.25	2.80	.84					.12	.36											5.71
Ruckersville.	James.										.30	.18		.55	2.13	.59					.15	.31											5.37
West Point	Coast.	.05									.01	.03		.14	.82	.23	.08				.90	.06											3.35
Williamsburg	James.	.24									T.	.10		.10	2.70		.50				.70	.15											4.99
North Carolina.																																	
Albemarle	Pedee	1.09									1.22	.01		.70	.56	.96	.52				.14	.39	.18										7.86
Beaufort	Coast.	.69	.11								.21	.25		.45	.72	1.41					.41	.03	.03										5.47
Belhaven.	Pungo	.30									.50	.30		.02	.02	.03	1.00				.30												3.99
Brewers	Pedee	T.	T.		T.		T.				.64	.02		.39	3.52	1.14	.01				T.	.10	.45										7.79
Caroleen	Santee	.21									1.30	.08		.38	1.49	1.69					.08	.08	.51										7.40
Chalybeate Springs.	Cape Fear.	.84									.21	.02		.03	.60	.46	.73				.21	.22	.13										3.72
Chapel Hill.	do.	.68									.68			.20	.32	1.50					.21	.22	.13										4.99
Charlotte	Santee	.75									1.35	T.		.48	.51	1.18					.16	.06	.44										5.80
Chimney Rock	do.										.90			.53	4.33	1.20					.21	.05	.14										9.53
Durham (near)	Neuse	.71									.62			.14	1.05	1.10	.54				.24	.14											5.59
Eagletown	Chowan	.50									.30	.05		T.	.95	.25	.41				.25	1.20	.22										4.92
Edenton	Coast.	2.21									T.	.20			.50	.55	1.00				.10	1.25	.30										6.81
Elizabeth City	Pasquotank	.85									.20	T.		.30	.10						.30	.55											4.30
Elizabethtown ||	Cape Fear.	1.00	.47										.40	.11	.51	2.00	T.				.15	.51											6.26
Elkin ||	Pedee	.06									.39	.18		.38	1.41						.08	.07											7.03
Enfield (near) ||	Tar.	.45	.12	1.00							.22	.12		.12	.22	.60					.105												5.14
Fayetteville ||	Cape Fear.	.90	.12								.28			.03	.52	1.18					.89	.15	.12										5.10
Globe (near)	Santee										.84			.55	3.01	2.20					.19	.01	.13										10.69
Goldsboro ||	Neuse	.39	.90								.01	.02		.08	.28		.99	.04			.19	.01	.13										4.68
Gorge (near)	Santee										.70			.32	.69	1.20					.10	.62											8.76
Graham ||	Cape Fear.	.30									.46	.52		.05	1.81	.80	.64				.25	.08	.05										7.24
Greensboro ||	do.	.18	.11								.62	.51		.08	.32	.85	.27				.25	.08	.22										5.57
Greenville ||	Tar.	.34	.88					.01			T.	.05	.01		.03	.37	1.73				.87	.01	.10										5.83
Hatteras	Coast.	.74	.01								.02	.14		.04	.95	.74	.08				.81	.45	.02										3.83
Henderson	Tar & Roanoke.	.38									.38	.03		.04	.95	.74	.08				.44	.22	.07										3.75
Hickory	Santee	.06									1.08	.03		.43	1.60	1.10					.09	.29	.29										5.97
Kings Mountain	do.										1.45	.21		.40	2.40	.90					.18	.20											6.73
Kinston	Neuse	1.05	.10								.21			.30	1.33	1.90					.59	1.77	.12										7.97
Lincolnton	Santee										1.67	.18		.30	1.54	2.02	1.10				.60												7.27
Louisburg ||	Tar.	.48	.12								.29			.13	.37	1.10					.57												3.27
Lumberton ||	Lumber	.61																															

Stations.	Watershed.	Day of month.																																Total.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
South Carolina.																																			
Aiken	Edisto	1.70																		.50		.70									.20		6.77		
Allendale	Savannah		.80																		.65										.90		2.00	9.25	
Anderson	do	.51								1.31				.93	1.67	1.67				.10	.03	.64									.98		7.34		
Batesburg	Edisto	1.63	.96											.82		2.03	2.29				.28	.34	.97								.82	.30	.68	.21	11.33
Beaufort	Coast	2.00				.25														.25	.25		1.42								.80			5.72	
Blackville	Edisto	.50	.13							.02				.99	.14	2.39	1.45			T.	.35	.03	.85			.75					.80			1.17	5.62
Blairs	Broad	1.95	T.							.15				.22	.50	1.95	.65															.65		12.30	
Bowman	Edisto	1.53								.17				1.83	1.76	2.85	2.05				.85	.20					.11	.73						.22	10.72
Broxton	Salkehatchie	.70	1.10		1.10									.82	.52	2.50	.56			.20	.10										.22		2.10	7.88	
Calhoun Falls	Savannah	1.40								.10				.52	.52	2.50	.56				.21	.04	.71								.72			7.02	
Camden	Wataree	1.37	.68											.21	.22	1.28	1.58				.55	.22	.28								.45	.12	.06	8.05	
Catawba	Catawba	1.56	.23							.58	.30			.04	.70	1.25	1.60				.40	.02	.23								.90	.03	.21		7.03
Chappells	Saluda	2.10	T.											.05	.62	1.95	.84				.47			.58							.42				3.80
Charleston	Coast	1.47				.16				.01	.01	.14			.24	.19	.15			T.	.23	T.	.65				.08				.30				3.90
Cheraw	Pedee	1.30	.36							.03	.02			.04	.59	.43	1.70				.53	.30	.13					.06			.10	.24	.05	.35	6.20
Clemson College	Savannah	.35								1.44				1.07	1.22	1.40					.12	.06	.60				.06				1.06				7.38
Columbia	Congaree	2.28								T.	.02	T.		.43	1.56	1.13	.25																		

TABLE 2.—Daily precipitation for March, 1913. District No. 2—Continued.

Stations.	Watershed.	Day of month.																															Total.		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Georgia—Contd.																																			
Quitman II.	Suwanee	.08	1.09									.90				.21	1.09						1.03								.96		5.36		
Ramhurst.	Coosa.				T.					T.	1.02			.49	2.34	.12					.10	.95			.04		1.55	1.16			.18		7.95		
Resaca II.	do.										1.08	.18		.38	2.75	.05						1.10					1.28	1.48					8.30		
Rome II.	do.				T.	T.					1.45	.10		.56	2.10	.12					.07	.91	.16				.12	1.42	T.		.08		7.09		
St. George II.	St. Marys.	.74			.47						1.27	T.			T.	.54	.13		.24	T.	T.	.56		.08		.17		T.	.38		.18		4.76		
St. Marys.	do.	1.25	.08		.70	.17				T.	1.24	.78			.13	.26	.04		.36		T.	.20	.07					T.	.81		.17		6.26		
Savannah.	Savannah.	2.12	.01		.24	.12				T.	.15	.02	T.		.21	.30	.07		T.	.43	T.	.96					T.	.28			.34		5.25		
Statesboro.	Ogeechee.	1.07	.10		.03					T.	T.	.07		.06	.68	.91	.47			.92	T.	.33			T.		T.	.60			.43		5.67		
Talbotton.	Chattah'hee.	1.85									.35	.10	.15	2.53	2.13	2.94	.08			.71	.10	1.60					1.44			.63		14.61			
Tallapoosa II.	Tallapoosa.					.27					2.30	.22		1.52	1.15	.37				.14	.86						.60	1.61			.23		9.27		
Thomasville.	Ocklocknee.	1.23			.04					.11	.81	.09		.02	1.20	.14				.01	T.	1.07	.02		.08	T.		.68		.16	.17		5.83		
Tifton.	Suwanee.	1.04								.06	.48	.16			.96	1.90	.30			.15		1.23				.16		.66			.30		7.40		
Toccoa II.	Savannah.	.24				T.				1.50	.21			.65	1.85	1.17					.02	.33	.65		.03	.15	.04	.95			.12	.28	8.19		
Valdosta II.	Suwanee.	.35	2.00		.10	.10				T.	.70				.85	.80				T.								.55			.50		6.75		
Valona.	Coast.				.40	1.00				.11	.50				.43							1.33				.25				.10			4.12		
Washington II.	Savannah.	1.85								.13	.08			1.07	1.10	2.05	.88				.32	.05	.72				T.	.85			T.	.15	9.25		
Waycross II.	Satilla.	.61			.22	.05				.04	.41			.03	.24	.39				.54	T.		.42	.11		.04		.54			.66		4.30		
Waynesboro II.	Savannah.	.27	.22											.03	.24	.39					.32	.18		.83			1.40			T.		7.54			
West Point II.	Chattah'hee.	.41								.87				2.53	.88	2.69	.80				.50	.12	.12	.08				2.02		.65	.05	12.72			
Woodbury II.	Flint.	1.08								.40	.20			1.89	1.24	5.50	.31			.14	.65		1.28					.48		.53		13.70			
Florida.																																			
Apalachicola.	Coast.	2.10	.20		.40					.20	1.10	.10			.30	.15				.18	.02	.65	.18	.03	.90	.09		.13			.06		4.78		
Arcadia.	Peace Creek.	.40	.02		.35									.02						.60		.59	.39	.35	.33	.02		.20	.17		.39		3.26		
Archer.	Waccasassa.	.46		.65						.12				1.00	.20					.35	.04	.59	.39	.35	.33	.02		.20	.17		.39		5.51		
Avon Park.	Kissimmee.	T.	.55		.14	.32					.97	.12								.03	.84	.80	.60	.27	.83					.03			4.22		
Bartow II.	Peace Creek.	.86	.02		.48						.08	1.04								.50	T.	.90	.75	1.00	T.			.04			.13	.31	.02	6.35	
Bassenger.	Kissimmee.	T.	T.			T.														.07	.79	.25				T.							4.65		
Bradentown.	Manatee.	.80			.55															.07	.79	.25				T.							2.77		
Brooksville.	Withlac'hee.	.43			.65						.47									.40	.25	1.03											4.26		
Carrabelle.	Coast.	2.00	.20		.30					.20	.60				.65					.34	.72	.04		.50	.70								5.70		
Cedar Keys.	do.	.02	.47		.03	.14					1.07																						3.95		
Clermont.	Lake.	.70		.93																2.10	1.30	.15	.10	.30									6.06		
Crescent City.	St. Johns.	.41		.25	.20					.01	.53	.01	T.							.56	.04	1.32	1.21	.01	.70	.01		.01	T.				7.72		
Eustis II.	Lake.	.52	.01		.67						.91	.32								.33	.03	.68	.20	.06		.40		.02	.02				6.28		
Federal Point.	St. Johns.	.46		.18	.25					.86	.67			.23						.31	.33	.96	.01	.16	T.			.23		.52		.01	.03	5.67	
Fenholloway.	Fenholloway.	2.40	.60		1.50						.50				.76	.11				.33	.02	.26	.29	T.	.39	.02	.05	.03	.62	.05	.25		7.57		
Fernandina II.	Coast.	.06	.46	.02	.04	.52	.15	.02			.70	.06	.01	.66	.23	.29	.03	.02	.26	.29	T.	.39	.02	.05	.03	.62	.05	.25		.45	.02	.51	5.10		
Fort Lauderdale II.	New.		.01							.06										.33	.45	.30	.08	.17		.03	.21						2.29		
Fort Meade.	Peace Creek.	.86		.17																T.	1.43	1.27	.24	.46									5.37		
Fort Myers.	Caloosa'hee.																			.45	T.	.19				T.	T.	T.	T.	T.	T.		0.94		
Fort Pierce.	Indian.	.40								.10										.30	T.	1.10	1.20	.10		.60				.40	.40	.30	4.90		
Gamesville II.	Lake.	.70	.72		.45						.02	1.70	.02		.08					.47							.06	.02			.30		.44	.06	5.79
Garniers (near).	Coast.	1.45			T.	T.				.32	.63	.39	.15	.01		1.0	1.43	.07		.38	1.67	.68	.06	.08	.35	.25			.26		.02	.03	10.37		
Grasmere.	Lake.	.51		1.45							1.40	.72								.15	.13	.55	.32	.17					.48		.05	1.50	29	8.45	
Griffin.	New.																																3.04		
Hilliard.	Nassau.	.38		1.13							1.10					.60					.49	.33	.79	.37	.03	.18	.20		.05	.04	.08	.30	.79	4.01	
Hypoluxo.	Lake.																																3.68		
Inverness II.	Withlac'hee.	.93		.46							.54				.32						.40	1.70											5.53		
Jacksonville.	St. Johns.	.24	.04		.74	.03				T.	.45	.71		1.34		.21				.23	.21	.35	.03	.60	.25	T.	.08	.02	T.		.47		.03	5.87	
Jasper.	Suwanee.	4.00	.50		1.20						.90	.17			.20	.30	.10				.35												8.72		
Johnstown.	do.	.35		.63	.06						3.34	.06				.38	.04				.02	.01	.10	T.				.64	.20		.34		6.85		
Key West.	Coast.			T.							.02																						0.34		
Kissimmee.	Kissimmee.	.70		T.	.19						1.56	.98									.25	.17	1.08	.80	.35	1.09		T.		.01	.07	T.	33	7.84	
Lake City.	Suwanee.	.24		1.28	.05					.06		.40									.38												3.68		
Live Oak II.	do.	1.02	.72		.77					.03	.12	.03									.03												3.67		
Lucerne Park.	Peace Creek.	.72		.26																															

TABLE 2.—Daily precipitation for March, 1913. District No. 2—Continued.

* Precipitation included in that of the next measurement.
† Separate dates of falls not recorded.
‡ Precipitation for the 24 hours ending on the morning when it is measured.
§ Precipitation is less than 0.01 inch rain or melted snow.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

TABLE 3.—Maximum and minimum temperatures at selected stations for March, 1913. District No. 2, South Atlantic and East Gulf States.

Date.	Virginia.										North Carolina.																			
	Callville.		Hot Springs.		Lynchburg.		Norfolk.		Richmond.		Charlotte.		Edenton.		Fayetteville.		Hatteras.		Newbern. §§		Raleigh.		Reidsville.		Salisbury.		Wilmington.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	61	45	57	34	60	43	62	54	60	45	61	54	72	58	68	57	64	57	62	58	62	56	64	51	65	52	64	56		
2.....	59	32	50	20	49	32	60	38	51	29	55	35	72	41	63	46	63	45	57	51	58	38	57	37	60	35	61	46		
3.....	57	20	56	19	59	29	56	31	57	26	53	29	58	28	60	29	58	40	64	38	58	31	57	27	58	29	61	36		
4.....	61	36	50	30	60	41	63	46	62	42	56	42	66	41	61	39	62	49	67	42	58	43	57	39	55	35	66	46		
5.....	63	41	50	32	57	35	53	45	59	43	62	44	63	49	63	48	57	41	63	49	62	48	63	40	53	33	61	53		
6.....	55	33	45	20	43	26	56	33	51	28	51	35	63	44	61	41	62	43	60	45	55	32	52	36	53	34	64	44		
7.....	40	16	29	10	38	20	37	26	37	21	48	28	47	26	51	25	45	34	55	31	43	26	46	20	62	24	49	32		
8.....	48	19	50	15	57	26	56	30	55	23	59	33	63	25	63	28	58	36	61	32	59	29	60	20	64	30	61	35		
9.....	69	35	59	28	69	29	68	42	68	42	65	42	70	39	72	32	64	45	68	38	68	40	70	36	70	43	69	42		
10.....	57	40	58	38	56	46	62	52	53	47	56	46	65	47	70	52	64	54	65	50	60	48	60	45	67	30	71	55		
11.....	65	50	52	41	63	46	63	45	61	46	65	49	69	49	68	58	65	51	66	58	64	52	64	45	68	48	68	56		
12.....	60	35	54	28	59	35	54	42	61	37	66	43	63	40	71	45	61	50	68	44	64	45	65	42	68	39	65	48		
13.....	63	45	51	43	49	43	67	48	63	44	67	51	70	47	76	51	68	59	73	48	71	49	56	46	60	50	72	51		
14.....	70	60	67	47	69	48	71	62	70	61	68	61	72	61	77	63	72	62	73	60	71	63	68	49	68	54	76	64		
15.....	71	59	68	50	68	58	73	61	70	60	66	50	72	60	70	62	69	61	73	62	70	52	66	58	69	52	73	63		
16.....	63	45	65	25	58	31	62	42	60	39	51	36	65	51	64	49	61	50	56	50	54	37	60	36	58	25	63	45		
17.....	53	28	40	22	49	29	49	36	50	30	53	30	66	36	55	33	50	42	55	38	52	32	54	26	58	27	48	37		
18.....	58	25	50	22	54	29	52	38	56	31	60	34	58	31	64	33	60	46	65	40	57	33	61	30	66	30	62	38		
19.....	68	35	57	27	66	33	65	45	67	36	61	43	70	40	64	42	67	57	65	40	63	41	65	38	66	39	62	46		
20.....	71	53	67	45	73	51	73	59	68	53	68	51	74	57	74	56	67	60	74	59	69	54	74	51	72	52	74	59		
21.....	75	50	67	51	69	57	76	59	72	57	68	55	76	58	80	59	70	62	77	56	75	60	70	54	72	51	76	62		
22.....	65	50	63	15	62	44	64	45	60	41	68	51	69	53	72	55	67	51	72	58	65	49	67	46	70	48	73	52		
23.....	66	30	54	30	63	35	62	43	64	35	68	45	67	38	73	40	68	52	73	58	67	40	66	36	71	41	67	45		
24.....	75	53	70	50	72	51	76	54	74	53	73	54	78	53	78	52	72	62	73	54	74	53	72	51	72	53	74	61		
25.....	78	62	73	52	74	65	78	66	77	65	75	65	77	64	79	66	72	64	75	64	77	66	74	65	75	53	75	66		
26.....	81	67	74	55	74	61	78	65	80	68	79	67	77	64	82	66	73	64	72	66	77	66	82	62	81	67	76	68		
27.....	74	43	73	29	71	36	75	42	73	39	69	35	73	53	82	47	73	48	69	69	72	37	81	51	76	42	73	45		
28.....	53	30	42	20	49	31	47	38	49	33	54	30	55	35	57	32	51	42	59	38	52	33	55	30	65	31	56	36		
29.....	61	28	52	22	57	30	54	41	57	34	63	38	62	34	68	34	62	49	72	41	61	35	63	32	65	32	63	39		
30.....	70	40	56	40	61	41	70	50	61	44	62	48	75	47	70	52	71	60	72	54	66	50	56	45	68	37	67	55		
31.....	77	33	66	44	76	50	76	53	75	47	78	49	78	50	81	53	71	59	64	56	78	51	76	50	80	47	78	54		
Mns..	64.1	39.9	56.9	32.7	60.8	39.7	63.2	46.2	62.0	41.9	62.8	44.3	67.9	45.8	68.9	46.6	64.1	51.8	66.7	49.9	63.9	44.8	63.9	41.8	66.3	40.7	66.7	49.5		

Date.	South Carolina.										Georgia.																	
	Charleston.		Columbia.		Conway. §§		Ferguson. §§		Georgetown.		Greenville. §§		Newberry.		Society Hill.		Albany. §§		Atlanta.		Augusta.		Dahlgene.		Macon.		Rome. §§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	67	61	63	56	65	56	75	64	78	48	65	48	60	52	66	45	63	55	64	37	63	56	63	44	63	47	64	45
2.....	61	46	56	41	64	33	75	45	54	48	63	37	59	38	58	33	57	40	44	31	56	41	51	29	50	37	48	31
3.....	61	41	60	32	61	35	74	32	68	35	54	26	57	28	59	40	63	34	58	32	60	33	56	23	59	31	59	26
4.....	60	52	61	42	66	43	65	45	68	58	60	27	62	38	61	46	68	42	60	46	63	42	58	35	64	43	65	25
5.....	69	54	68	51	72	51	70	50	70	60	62	38	67	47	67	44	73	58	56	40	68	50	58	39	67	47	61	38
6.....	66	47	60	41	61	44	64	49	75	45	55	37	58	41	63	32	68	41	47	32	58	40	48	36	56	38	51	36
7.....	51	40	52	31	58	37	77	40	52	34	50	26	44	25	55	32	63	36	46	25	52	31	50	22	52	30	49	26
8.....	58	44	63	34	76	30	65	31	70	34	58	26	62	29	63	35	65	38	61	35	64	32	59	29	62	32	65	26
9.....	63	48	67	44	75	34	70	47	70	34	64	29	64	38	66	44	64	51	55	45	62	40	58	37	60	42	68	28
10.....	74	58	70	54	77	36	76	38	78	52	53	41	62	48	70	49	63	54	64	45	70	56	54	45	68	50	65	43
11.....	72	60	71	58	77	57	73	57	73	63	68	48	72	57	70	44	72	58	63	52	73	59	62	50	70	51	66	49
12.....	64	57	71	49	78	57	74	52	78	64	64	47	69	45	70	51	77	51	67	48	73	52	62	45	72	49	68	39
13.....	75	61	75	54	71	54	77	54	74	54	61	49	70	52	76	57	84	61	70	53	76	58	68	51	79	57	69	39
14.....	76	64	72	61	80	67	78	56	80	64	64	52	68	62	75	61	72	66	70	61	70	63	68	56	71	62	79	53
15.....	70	56	69	51	72	64	70	60	72	62	66	57	66	52	70	50	57	55	62	43	67	52	65	50	70	48	60	55
16.....	59	47	52	42	61	50	60	49	60	49	48	40	52	43	57	36	50	42	43	34	52	42	50	32	48	39	44	36
17.....	52	43	54	36	58	38	56	40	52	39	56	27	54	30	54	37	58	38	55	31	56	34	54	28	56	34	58	27
18.....	61	46	64	37	71	37	65	37	60	41	58	31	51	32	63	43	60	42	60	38	66	39	57	34	64	41	64	28
19.....	61	55	57	47	70	48	60	43	62	51	62	35																

TABLE 3.—Maximum and minimum temperatures at selected stations for March, 1913. District No. 2—Continued.

Date.	Georgia.										Florida.																	
	Savannah.		Thomasville.		Waycross. §§		West Point. §§		Avon Park.		Fort Myers.		Jacksonville.		Key West.		Marianna. §§		Miami.		New Smyrna. §§		Orlando.		Pensacola.		Tallahassee. §§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	67	59	71	54	68	45	63	53	87	67	83	70	81	66	82	73	65	32	82	75	89	76	86	68	67	46	71	60
2....	59	46	57	38	57	47	53	33	76	54	73	62	66	48	84	71	60	33	83	68	63	56	79	52	59	40	68	42
3....	67	41	64	34	65	34	60	29	75	54	78	56	67	42	81	71	69	44	76	71	73	50	73	48	57	43	68	37
4....	62	53	66	51	74	57	65	35	85	60	81	62	69	56	82	72	60	44	81	67	84	51	82	54	66	53	66	50
5....	69	56	74	53	71	45	66	45	78	60	80	63	70	58	80	69	65	35	81	65	70	57	74	59	69	54	73	52
6....	67	47	72	45	60	40	56	36	79	58	78	59	71	55	79	71	70	34	82	62	71	55	75	55	70	50	74	44
7....	57	38	59	41	66	41	51	29	86	51	78	59	59	46	81	71	59	39	79	61	67	50	71	54	60	43	63	42
8....	65	44	64	45	63	46	63	30	76	54	80	57	63	47	80	71	67	45	78	71	76	54	73	53	59	47	65	44
9....	67	50	60	52	80	53	57	37	83	57	82	60	75	53	81	72	62	50	79	71	84	57	79	55	66	51	62	47
10....	75	60	69	55	74	60	68	49	85	63	84	63	80	63	82	74	63	50	81	73	81	62	84	63	64	58	73	57
11....	72	61	70	54	79	51	69	53	85	65	83	67	77	63	84	72	71	55	82	70	77	60	82	62	70	58	72	60
12....	68	56	78	52	85	58	68	43	87	64	86	66	77	60	82	72	75	50	83	68	80	67	85	63	70	57	81	55
13....	79	60	82	67	84	67	77	52	86	69	87	68	83	68	84	75	86	38	82	75	79	65	87	67	74	66	81	56
14....	77	64	78	69	82	67	70	61	87	70	83	68	81	69	84	76	80	66	81	74	86	66	85	68	70	66	78	68
15....	73	54	74	53	58	50	61	56	90	69	84	68	82	55	84	75	61	55	82	76	77	57	88	72	69	50	76	69
16....	55	45	53	43	57	41	46	37	75	60	80	66	59	49	83	72	60	41	80	66	70	53	80	58	55	41	60	44
17....	62	43	58	39	69	42	57	29	61	53	66	57	55	42	74	70	61	38	74	65	65	56	62	50	61	40	59	39
18....	61	44	70	42	65	46	64	37	67	57	67	61	62	54	80	70	71	39	76	68	80	63	67	54	66	46	71	41
19....	63	54	68	56	82	56	58	44	75	61	78	63	70	60	82	72	75	48	80	69	84	60	80	66	70	66	71	55
20....	67	56	81	60	80	59	67	48	85	65	83	65	80	58	84	75	83	57	82	73	84	64	84	63	75	62	75	57
21....	81	63	73	61	81	58	75	56	85	64	85	68	82	62	84	75	73	64	83	75	88	63	85	65	72	67	74	62
22....	74	61	80	62	78	60	75	50	84	63	86	66	75	63	84	74	82	61	84	74	79	60	84	65	62	77	62	61
23....	71	58	80	60	84	56	77	54	85	68	84	67	75	64	84	72	84	60	81	74	77	59	80	68	71	65	83	62
24....	78	62	83	64	86	63	79	63	84	66	83	68	79	66	82	71	83	64	81	72	78	67	83	63	71	66	83	69
25....	77	66	80	65	84	68	79	63	85	68	87	68	82	68	83	76	83	62	82	73	83	66	85	67	78	67	78	65
26....	80	68	81	65	74	66	81	67	85	67	88	65	84	68	84	76	84	68	81	75	76	67	86	67	78	61	81	68
27....	70	44	73	42	61	48	46	41	84	67	83	68	73	46	85	74	72	65	82	72	68	68	83	68	61	39	61	54
28....	57	39	59	35	72	36	60	29	73	56	77	61	59	41	82	72	60	32	76	68	76	55	72	49	60	36	61	35
29....	64	47	66	47	72	47	61	34	76	59	83	62	68	55	83	72	65	35	80	70	75	60	76	57	61	50	70	50
30....	66	56	70	56	81	57	73	46	86	65	83	65	74	61	84	72	80	48	82	71	72	66	85	65	70	56	71	52
31....	78	57	81	54	82	51	82	47	82	67	82	68	79	59	81	73	82	52	82	67	72	62	80	65	75	58	81	57
Mns..	68.3	53.3	70.8	52.1	70.1	52.1	65.4	44.7	81.2	62.0	81.1	64.1	72.8	56.9	82.2	72.6	71.3	48.5	80.6	70.3	76.9	60.4	79.7	60.5	67.2	53.4	72.0	53.4

Date.	Tampa, Fla.		Alabama.																		Mississippi.														
			Anniston.		Bermuda.		Birming- ham.		Eufaula. §§		Mobile.		Montgom- ery.		Newbern.		Union- town.		Bay St. Louis.		Colum- bus. §§		Jackson.		Laurel.		Meridiam.								
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.							
1.....	80	71	57	38	69	49	57	36	60	52	61	47	62	42	60	48	68	43	63	55	46	44	63	44	71	44	59	38							
2.....	74	51	46	29	55	35	48	31	52	33	60	40	53	36	54	30	54	33	64	40	46	29	54	30	67	31	51	53							
3.....	75	49	59	26	64	30	60	34	59	28	60	42	60	35	63	29	60	31	63	42	59	29	64	34	62	31	63	30							
4.....	80	60	63	45	68	43	66	49	65	34	66	53	65	49	68	46	70	45	62	54	69	32	73	53	67	49	68	50							
5.....	73	61	57	37	69	50	58	38	67	44	72	54	65	48	59	42	64	43	69	52	59	36	65	44	69	45	63	42							
6.....	75	59	47	31	60	41	50	33	60	36	67	48	57	40	55	36	59	43	71	44	50	36	56	40	60	37	52	37							
7.....	75	55	46	27	53	40	48	26	52	29	57	42	49	32	56	31	49	31	64	41	51	28	52	34	57	32	46	31							
8.....	70	54	64	29	67	36	64	33	60	32	60	45	64	35	69	32	68	34	58	45	66	30	70	36	69	34	65	33							
9.....	80	59	59	45	60	47	58	49	58	35	65	50	57	48	59	47	56	42	62	51	57	34	60	47	60	48	54	48							
10.....	81	65	67	50	70	58	64	53	66	48	68	57	71	56	64	51	76	48	75	58	63	46	64	53	70	50	66	54							
11.....	78	68	65	45	69	54	65	50	68	53	70	55	68	54	65	50	73	52	70	53	70	46	72	46	67	49	65	48							
12.....	86	63	68	44	67	48	66	48	70	45	70	57	67	48	67	45	66	47	68	54	65	44	61	52	69	54	60	46							
13.....	85	69	73	59	81	60	72	59	77	48	72	65	81	61	76	63	77	56	72	63	76	47	76	58	77	56	77	57							
14.....	83	70	78	62	75	60	77	62	71	59	72	63	74	63	79	64	77	64	76	64	78	61	76	57	79	56	76	60							
15.....	81	73	62	39	65	48	64	36	58	52	70	50	65	43	64	55	77	48	70	56	60	47	65	44	69	52	62	38							
16.....	75	58	43	33	49	37	45	33	47	39	52	40	48	38	55	36	55	36	56	38	48	32	49	31	60	34	47	33							
17.....	58	49	58	27	61	37	57	32	57	29	63	40	59	34	62	24	60	32	65	38	61	30	64	30	63	28	57	29							
18.....	65	55	63	42	67	51	66	41	64	34	69	45	65	42	71	37	64	41	62	43	68	34	70	36	69	35	65	33							
19.....	76	61	60	49	68	37	66	51	63	38	67	59	62	52	72	53	67	41	63	58	64	38	73	55	64	54	61	54							
20.....	82	66	66	54	82	59	68	54	75	49	70	61	77	56	77	55	76	55	71	59	72	54	80	60	79	59	77	57							
21.....	83	68	74	52	77	61	75	51	70	55	77	65	76	58	76	55	76	56	77	63	71	54	71	56	80	56	76	52							
22.....	86	65	73	45	78	55	73	42	75	53	79	59	76	52	74	48	77	48	75	59	72	40	75	44	75	47	70	45							
23.....	84	68	74	62	83	60	75	63	75	58	73	66	78	62	79	47	78	59	73	63	78	43	84	61	78	56	78	61							
24.....	83	67	77	64	80	64	79	66	78	61	76	67	81	64	78	64	80	60	74	66	80	64	84	69	80	67	81	67							
25.....	85	67	79	66	80	67	81	66	79	62	76	68	82	66	86	66	82	67	77	70	83	67	83	70	81	69	82	69							
26.....	84	69	77	54	81	70	80	46	81	64	75	58	82	54	79	67	83	74	80	71	82	68	84	58	85	66	82	48							
27.....	78	56	54	31	74	40	46	32	49	44	59	42	54	35	67	39	79	37	76	45	43	35	58	38	76	40	48	34							
28.....	71	50	54	28	59	31	55	29	56	27	60	37	56	32	57	29	59	31	57	36	56	28	62	31	54	30	54	31							
29.....	80	59	60	38	66	39	60	40	62	30	62	50	62	42	66	36	70	38	65	45	65	30	70	40	67	39	66	36							
30.....	73	66	71	51	76	53	73	51	57	42	75	56	74	53	73	52	78	47	68	54	77	35	80	52	77	49	76	51							
31.....	78	65	80	49	82	50	80	56	77	48	72	57	80	56	83	53	80	52	75	56	82	52	83	60	80	53	82	57							
Mns..	78.1	61.8	63.7	43.6	69.5	48.7	64.4	44.8	64.8	43.8	67.5	52.8	66.8	47.9	68.2	46.1	69.6	46.3	68.4	52.8	65.1	41.7	69.0	47.2	70.4	46.8	65.4	45.2							